



DEPARTMENT OF ENERGY

10 CFR Part 429

[EERE-2012-BT-STD-0045]

RIN 1904-AE90

Energy Conservation Program for Appliance Standards: Certification for Ceiling Fan Light Kits, General Service Incandescent Lamps, Incandescent Reflector Lamps, Ceiling Fans, Consumer Furnaces and Boilers, Consumer Water Heaters, Dishwashers, Commercial Clothes Washers, Battery Chargers, and Dedicated-Purpose Pool Pumps

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of proposed rulemaking and request for comment.

SUMMARY: The U.S. Department of Energy (“DOE” or the “Department”) proposes to amend the certification provisions for ceiling fan light kits (“CFLKs”), general service incandescent lamps (“GSILs”), incandescent reflector lamps (“IRLs”), ceiling fans, consumer furnaces and boilers, consumer water heaters, dishwashers, commercial clothes washers (“CCWs”), battery chargers, and dedicated-purpose pool pumps (“DPPPs”). DOE is proposing amendments to the certification and reporting provisions for these products and equipment to ensure reporting that is consistent with currently applicable energy conservation standards and to ensure DOE has the information necessary to determine the appropriate classification of products for the application of standards. DOE seeks comment from interested parties on all aspects of this proposal.

DATES: DOE will accept comments, data, and information regarding this proposal no later than [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

ADDRESSES: Interested persons are encouraged to submit comments using the Federal eRulemaking Portal at <https://www.regulations.gov>. Follow the instructions for submitting comments. Alternatively, interested persons may submit comments by email to the following

email address: *ApplianceStandardsQuestions@ee.doe.gov*. Include docket number EERE-2012-BT-STD-0045 and/or RIN 1904-AE90 in the subject line of the message. Submit electronic comments in WordPerfect, Microsoft Word, PDF, or ASCII file format, and avoid the use of special characters or any form of encryption.

Although DOE has routinely accepted public comment submissions through a variety of mechanisms, including postal mail and hand delivery/courier, the Department has found it necessary to make temporary modifications to the comment submission process in light of the ongoing Covid-19 pandemic. DOE is currently suspending receipt of public comments via postal mail and hand delivery/courier, and instead, the Department is only accepting electronic submissions at this time. If a commenter finds that this change poses an undue hardship, please contact Appliance Standards Program staff at (202) 586-1445 to discuss the need for alternative arrangements. Once the Covid-19 pandemic health emergency is resolved, DOE anticipates resuming all of its regular options for public comment submission, including postal mail and hand delivery/courier.

No telefacsimiles (“faxes”) will be accepted. For detailed instructions on submitting comments and additional information on the rulemaking process, see section V (Public Participation) of this document.

Docket: The docket for this activity, which includes *Federal Register* notices, comments, and other supporting documents/materials, is available for review at <https://www.regulations.gov>. All documents in the docket are listed in the <https://www.regulations.gov> index. However, some documents listed in the index, such as information that is exempt from public disclosure, may not be publicly available.

The docket webpage can be found at <https://www.regulations.gov/docket?D=EERE-2012-BT-STD-0045>. The docket webpage contains instructions on how to access all documents, including public comments, in the docket. See section V for information on how to submit comments through <https://www.regulations.gov>.

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I. Authority and Background

A. Authority

The Energy Policy and Conservation Act, as amended (“EPCA”)¹ authorizes DOE to regulate the energy efficiency of a number of consumer products and certain industrial

¹ All references to EPCA in this document refer to the statute as amended through the Energy Act of 2020, Public Law 116-260 (Dec. 27, 2020).

equipment. (42 U.S.C. 6291–6317, as codified) Title III, Part B² of EPCA, Pub. L. 94-163, established the Energy Conservation Program for Consumer Products Other Than Automobiles, which sets forth a variety of provisions designed to improve energy efficiency. Title III, Part C³ of EPCA, added by Pub. L. 95-619, Title IV, section 441(a), established the Energy Conservation Program for Certain Industrial Equipment. These products and equipment include CFLKs, GSILs, IRLs, ceiling fans, consumer furnaces and boilers, consumer water heaters, dishwashers, CCWs, battery chargers, and DPPP, the subjects of this document. (42 U.S.C. 6292(a)(4-6) and (14); 42 U.S.C. 6295(u) and (ff); 42 U.S.C. 6311(1)(A) and (H))

Under EPCA, the energy conservation program consists essentially of four parts: (1) testing, (2) labeling, (3) the establishment of Federal energy conservation standards, and (4) certification and enforcement procedures. Relevant provisions of EPCA specifically include definitions (42 U.S.C. 6291; 42 U.S.C. 6311), test procedures (42 U.S.C. 6293; 42 U.S.C. 6314), labeling provisions (42 U.S.C. 6294; 42 U.S.C. 6315), energy conservation standards (42 U.S.C. 6295; 42 U.S.C. 6313), and the authority to require information and reports from manufacturers (42 U.S.C. 6296; 42 U.S.C. 6316).

The Federal testing requirements consist of test procedures that manufacturers of covered products and equipment must use as the basis for: (1) certifying to DOE that their products or equipment comply with the applicable energy conservation standards adopted pursuant to EPCA (42 U.S.C. 6295(s); 42 U.S.C. 6316(a)), and (2) making representations about the efficiency of those consumer products or industrial equipment (42 U.S.C. 6293(c); 42 U.S.C. 6314(d)). Similarly, DOE must use these test procedures to determine whether the products or equipment comply with relevant standards promulgated under EPCA. (42 U.S.C. 6295(s); 42 U.S.C. 6316(a))

² For editorial reasons, upon codification in the U.S. Code, Part B was re-designated as Part A.

³ For editorial reasons, upon codification in the U.S. Code, Part C was re-designated at Part A-1.

EPCA authorizes DOE to enforce compliance with the energy and water conservation standards established for covered products and equipment. (42 U.S.C. 6299-6305; 42 U.S.C. 6316(a)-(b)) DOE has promulgated enforcement regulations that include reporting requirements for covered products and equipment including CFLs, GSILs, IRLs, ceiling fans, consumer furnaces and boilers, consumer water heaters, dishwashers, CCWs, battery chargers, and DППPs. *See* title 10 of the Code of Federal Regulations (“CFR”) part 429. The certification regulations ensure that DOE has the information it needs to assess whether regulated products and equipment sold in the United States comply with the law.

B. Background

DOE's certification regulations are a mechanism that DOE uses to help ensure compliance with its regulations by collecting information about the energy and water use characteristics of covered products and covered equipment sold in the United States. Manufacturers of all covered products and covered equipment must submit a certification report before a basic model is distributed in commerce, annually thereafter, and if the basic model is redesigned in such a manner to increase the consumption or decrease the efficiency of the basic model such that the certified rating is no longer supported by test data. Additionally, manufacturers must report when production of a basic model has ceased and is no longer offered for sale as part of the next annual certification report following such cessation. DOE requires the manufacturer of any covered product or covered equipment to establish, maintain, and retain the records of certification reports, of the underlying test data for all certification testing, and of any other testing conducted to satisfy the requirements of part 429, part 430, and/or part 431 until two years after notifying DOE that a model has been discontinued. 10 CFR 429.71. Certification reports provide DOE and consumers with comprehensive, up-to-date efficiency information and support effective enforcement.

To ensure that all covered products and covered equipment distributed in the United States comply with DOE's energy and water conservation standards and reporting requirements, DOE has promulgated certification, compliance, and enforcement regulations in 10 CFR part 429. On March 7, 2011, the Department published in the *Federal Register* a final rule regarding Certification, Compliance, and Enforcement for Consumer Products and Commercial and Industrial Equipment, which revised, consolidated, and streamlined the Department's existing certification, compliance, and enforcement regulations for certain consumer products and commercial and industrial equipment covered under EPCA. 76 FR 12422.⁴ Since that time, DOE has also completed multiple rulemakings regarding Certification, Compliance, and Enforcement for specific covered products or equipment. See, for example, the May 5, 2014, final rule regarding certification of commercial and industrial heating, ventilating, air conditioning (HVAC), refrigeration, and water heating equipment. 79 FR 25486. In this rulemaking, DOE is once again proposing to revise its certification regulations for certain covered products, as further detailed below.

1. Ceiling Fan Light Kits

CFLKs are “covered products” for which DOE is authorized to establish and amend energy conservation standards and test procedures. (42 U.S.C. 6291(50), 42 U.S.C. 6293(b)(16)(A)(ii), 42 U.S.C. 6295(ff)(2)-(5)) DOE’s energy conservation standards for CFLKs are currently prescribed at 10 CFR 430.32(s). Test procedures for CFLKs are currently prescribed at 10 CFR 430.23; 10 CFR part 430, subpart B, appendix V, “Uniform Test Method for Measuring the Energy Consumption of Ceiling Fan Light Kits With Pin-Based Sockets for Fluorescent Lamps” (“appendix V”); and 10 CFR part 430, subpart B, appendix V1, “Uniform Test Method for Measuring the Energy Consumption of Ceiling Fan Light Kits Packaged With Other Fluorescent Lamps (not Compact Fluorescent Lamps or General Service Fluorescent

⁴ DOE subsequently published two correction notifications on May 2, 2011 (to correct a drafting error and erroneous internal cross references) and on August 2, 2011 (to correct presentation of a formula). 76 FR 24762; 76 FR 46202, respectively.

Lamps), Packaged With Other SSL Lamps (not Integrated LED Lamps), or With Integrated SSL Circuitry” (“appendix VI”). The sampling requirements for determining represented values based on the results of testing of CFLKs are found at 10 CFR 429.33(a) and (b) specifies the information that must be included in certification reports submitted to DOE for CFLKs.

EPCA directed that the initial test procedures for CFLKs be based on the test procedures referenced in the ENERGY STAR® specifications for Residential Light Fixtures and Compact Fluorescent Light Bulbs as in effect on August 8, 2005. (42 U.S.C. 6293(b)(16)(A)(ii)) DOE published a final rule on December 8, 2006, establishing test procedure requirements for CFLKs in appendix V that incorporated by reference the relevant ENERGY STAR requirements. 71 FR 71340.

CFLKs manufactured on or after January 1, 2007, and prior to January 21, 2020, must be packaged with lamps to fill all sockets, with additional standards applicable based on the type of the CFLK’s lamp sockets. 10 CFR 430.32(s)(3)-(5). Lamps packaged with CFLKs with medium screw base sockets must meet efficacy standards, while medium screw base compact fluorescent lamps (“CFLs”) must additionally meet standards for lumen maintenance, rapid cycle stress, and lifetime. 10 CFR 432.32(s)(3). CFLKs with pin-based sockets for fluorescent lamps must use an electronic ballast and the lamp-ballast platform must meet efficacy standards. 10 CFR 432.32(s)(4). CFLKs with other than medium screw base or pin-based sockets must not be capable of operating with lamps that total more than 190 watts. 10 CFR 432.32(s)(5). The standards at 10 CFR 430.32(s)(3)-(5) will be referred to collectively in this document as the January 1, 2007 standards.

EPCA also provides that DOE “may review and revise” the initial ceiling fan light kit test procedure (TP). (42 U.S.C. 6293(b)(16)(B)). On December 24, 2015, DOE published a final rule (“December 2015 CFLK TP Final Rule”) making two key updates to its CFLK test procedure. 80 FR 80209. First, DOE updated the CFLK test procedure to require that representations of efficacy, including certifications of compliance with CFLK standards, be

made according to the corresponding DOE lamp test procedures, where they exist (*e.g.*, for a CFLK with medium screw base sockets that is packaged with CFLs, the CFLK test procedure references the DOE test procedure for CFLs at 10 CFR 430.23(y)). 80 FR 80209, 80210 (Dec. 24, 2015). Second, DOE updated the CFLK test procedure by establishing in a separate appendix, *i.e.*, appendix V1, the test procedure for CFLKs packaged with inseparable light sources that require luminaire efficacy testing (*e.g.*, CFLKs with integrated solid state lighting (“SSL”) circuitry) and for CFLKs packaged with lamps for which DOE test procedures did not exist. 80 FR 80209, 80212. With these changes, the December 2015 CFLK TP Final Rule aligned requirements for measuring efficacy of lamps and/or light sources in CFLKs with current DOE lamp test procedures.

DOE published a final rule on January 6, 2016, amending energy conservation standards (ECS) for CFLKs (“January 2016 CFLK ECS Final Rule”). 81 FR 580. In that final rule, DOE established amended standards based on the efficacy of the lamps (with additional requirements for medium base CFLs and pin-based fluorescent lamps) packaged with the CFLK, except where the lamps are not designed to be consumer replaceable from the CFLK (*i.e.*, integrated SSLs), in which case luminaire efficacy is used. *Id.* These amended standards apply to CFLKs manufactured on or after January 21, 2020,⁵ and will be referred to collectively in this document as the January 21, 2020 standards. *See* 10 CFR 432.32(s)(6).

In the December 2015 CFLK TP Final Rule, DOE determined that the amendments in that final rule would likely change the measured values required to comply with the then-existing CFLK standards for all CFLKs except CFLKs with medium screw base sockets. 80 FR 80209, 80212. As such, representations regarding CFLKs subject to the January 21, 2020 standards

⁵ After DOE's promulgation of final rules establishing energy conservation standards for CFLKs and ceiling fans, Congress enacted S. 2030, the “Ceiling Fan Energy Conservation Harmonization Act” (“the Act”), which was signed into law as Public Law 115-161 on April 3, 2018. The Act amended the compliance date for the CFLK standards to establish a single compliance date for the energy conservation standards for both CFLKs and ceiling fans. On May 16, 2018, DOE published a final rule that amended the compliance date for CFLKs in the relevant sections of the CFR by replacing “January 7, 2019” with “January 21, 2020.” 83 FR 22587.

must be based on the amended test procedure, including appendix V1. See *id.* and 81 FR 580 (January 6, 2016).

Neither the December 2015 CFLK TP Final Rule nor the January 2016 CFLK ECS Final Rule amended the reporting requirements for CFLKs to reflect the updated metrics from the test procedure and amended standards. The reporting requirements at 10 CFR 429.33 continue to require manufacturers to report based on the January 1, 2007 standards, including information that is no longer relevant. This inconsistency between the reporting requirements and the January 21, 2020 standards may lead to confusion regarding which standards are applicable as well as the reporting of unnecessary information. Therefore, DOE is proposing to update the reporting requirements to address the January 21, 2020 standards and remove the reporting requirements for the January 1, 2007 standards.

2. GSILs and IRLs

GSILs and IRLs are “covered products” for which DOE is authorized to establish and amend energy conservation standards and test procedures. (42 U.S.C. 6292(a)(14)) DOE’s existing test procedures for general service fluorescent lamps (“GSFLs”), IRLs and GSILs appear at title 10 CFR part 430, subpart B, appendix R (“appendix R”) (“Uniform Test Method for Measuring Average Lamp Efficacy (“LE”), Color Rendering Index (“CRI”), and Correlated Color Temperature (“CCT”) of Electric Lamps”).

DOE test procedures for GSFLs, IRLs, and GSILs are codified in appendix R and associated sampling and reporting requirements are codified in 10 CFR 429.27. DOE standards for GSFLs, IRLs, and GSILs are codified respectively at 10 CFR 430.32(n)(1), (2), (4), (6), and (7) and (x).

On July 6, 2009, DOE published a final rule amending the test procedures for GSFLs, IRLs, and GSILs. 74 FR 31829. These amendments consisted largely of: (1) referencing the most current versions of several lighting industry test standards incorporated by reference; (2)

adopting certain technical changes and clarifications; and (3) expanding the test procedures to accommodate new classes of lamps to which coverage was extended by the Energy Independence and Security Act of 2007 (Public Law 110-140). *Id.* The final rule also addressed the then recently established statutory requirement to expand test procedures to incorporate a measure of standby mode and off mode energy consumption and determined that, because these modes of energy consumption were not applicable to the lamps, an expansion of the test procedures was not necessary. *Id.* Shortly thereafter, DOE again amended the test procedures to adopt reference ballast settings necessary for the additional GSFLs for which DOE was establishing standards. 74 FR 34080, 34096 (July 14, 2009).

DOE most recently amended the test procedures for GSFLs and GSILs in a final rule published on January 27, 2012. 77 FR 4203. DOE updated several references to the industry test standards referenced in DOE's test procedures and established a lamp lifetime test method for GSILs. *Id.* In that final rule, DOE determined amendments to the existing test procedure for IRLs were not necessary. *Id.*

On June 3, 2021, DOE published a notice of proposed rulemaking (NOPR) amending the test procedures for GSFL, IRLs, and GSILs. 86 FR 29888 ("June 2021 NOPR"). In the June 2021 NOPR, DOE proposed to update to the latest versions of the referenced industry test standards; clarify definitions, test conditions and methods; clarify test frequency and inclusion of cathode power in measurements for GSFLs; provide a test method for measuring CRI of GSILs and IRLs and for measuring lifetime of IRLs; allow manufacturers to make voluntary (optional) representations of GSFLs at high frequency settings; and to align sampling and certification requirements with proposed test procedure terminology and with the Federal Trade Commission's labeling program. *Id.*

In this NOPR, DOE is proposing to revise the reporting requirements to reflect the current energy conservation standards for GSILs and IRLs and include other characteristics in

the certification report needed to determine the applicable product classes. DOE is not proposing revisions to GSFL reporting requirements in this NOPR.

3. Ceiling Fans

Ceiling fans are “covered products” for which DOE is authorized to establish and amend energy conservation standards and test procedures. (42 U.S.C. 6291(49), 42 U.S.C. 6293(b)(16)(A)(ii) and (B), 42 U.S.C. 6295(ff)(1) and (6)(C)) DOE’s existing test procedure for ceiling fans appears at 10 CFR 430.23 and appendix U of 10 CFR part 430, subpart B, “Uniform Test Method for Measuring the Energy Consumption of Ceiling Fans.” Sampling and reporting requirements for ceiling fans are set forth at 10 CFR 429.32. DOE’s existing energy conservation standards for ceiling fans are located in 10 CFR 430.32(s).

On July 25, 2016, DOE published a final rule which amended the test procedures for ceiling fans at appendix U. 81 FR 48620 (“July 2016 Final Rule”). On January 19, 2017, DOE established energy conservation standards for ceiling fans, expressed as the minimum allowable efficiency in terms of cubic feet per minute per watt (“CFM/W”), as a function of ceiling fan diameter in inches. These standards are applicable to all ceiling fans manufactured in, or imported into, the United States on and after January 21, 2020. 82 FR 6826, 6827 (“January 2017 CF ECS Final Rule”).

On September 30, 2019, DOE published a NOPR proposing amendments to the test procedure. 84 FR 51440 (“September 2019 NOPR”). Additionally, on October 17, 2019, DOE hosted a public meeting to present the September 2019 NOPR proposals.

On December 27, 2020, the Energy Act of 2020 (Pub. L. 116-260) was signed into law, and amended performance standards for large-diameter ceiling fans (“LDCFs”).⁶ (42 U.S.C. 6295(ff)(6)(C)(i), as codified) Specifically, section 1008 of the Energy Act of 2020 amended section 325(ff)(6) of EPCA to specify that large-diameter ceiling fans manufactured on or after

⁶ A large-diameter ceiling fan is a ceiling fan that is greater than seven feet in diameter. 10 CFR part 430, subpart B, appendix U, section 1.14.

January 21, 2020, are not required to meet minimum ceiling fan efficiency requirements in terms of the ratio of the total airflow to the total power consumption (*i.e.*, CFM/W) as established in the January 2017 CF ECS Final Rule. (42 U.S.C. 6295(ff)(6)(C)(i)(I), as codified) Instead, LDCFs are required to meet specified minimum efficiency requirements based on the Ceiling Fan Energy Index (“CFEI”) metric, with one standard based on operation of the fan at high speed and a second standard based on operation of the fan at 40 percent speed or the nearest speed that is not less than 40 percent speed. (42 U.S.C. 6295(ff)(6)(C)(i)(II), as codified)

On May 27, 2021, DOE published a final rule to amend the current regulations for large-diameter ceiling fans, corresponding to the provisions in the Energy Act of 2020. 86 FR 28469 (“May 2021 Technical Amendment”) The May 2021 Technical Amendment also implemented conforming amendments to the ceiling fan test procedure to ensure consistency with the Energy Act of 2020.

Current ceiling fan reporting requirements do not reflect the amended energy conservation standards adopted in the January 2017 CF ECS final rule, nor do they reflect the updated performance standards for large-diameter ceiling fans as established in the Energy Act of 2020. Therefore, DOE is proposing to update the reporting requirements to reflect current standards.

4. Consumer Furnaces and Boilers

Consumer furnaces and boilers are included in the list of “covered products” for which DOE is authorized to establish and amend energy conservation standards and test procedures.⁷ (42 U.S.C. 6292(a)(5)) DOE’s energy conservation standards for consumer furnaces and boilers are currently prescribed at 10 CFR 430.32(e). Test procedures for consumer furnaces and boilers are currently specified in 10 CFR part 430, subpart B, appendix N, “Uniform Test Method for

⁷ The list of covered products includes “furnaces;” however, EPCA defines a “furnace,” in relevant part, as “an electric central furnace, electric boiler, forced-air central furnace, gravity central furnace, or low pressure steam or hot water boiler.” (42 U.S.C. 6291(23)(C))

Measuring the Energy Consumption of Furnaces and Boilers” (“appendix N”). Reporting requirements for consumer furnaces and boilers are set forth in 10 CFR 429.18.

The DOE test procedure for consumer furnaces and boilers at appendix N is used to determine the annual fuel utilization efficiency (“AFUE”), which for gas-fired and oil-fired furnaces and boilers accounts for fossil fuel consumption in active, standby, and off modes, but does not include electrical energy consumption. For electric furnaces and boilers, AFUE accounts for electrical energy consumption in active mode. Appendix N also includes separate provisions to determine the electrical energy consumption in standby mode ($P_{W,SB}$) and off mode ($P_{W,OFF}$) in watts for gas-fired, oil-fired, and electric furnaces and boilers.

On October 20, 2010, DOE published a final rule in the *Federal Register* to amend its test procedure for consumer furnaces and boilers to establish a method for measuring the electrical energy use in standby mode and off mode for gas-fired and oil-fired boilers in satisfaction of 42 U.S.C. 6295(gg)(2)(A), which requires that test procedures for all covered products account for standby mode and off mode energy consumption. 75 FR 64621. DOE most recently updated its test procedure for consumer furnaces and boilers in a final rule published in the *Federal Register* on January 15, 2016 (January 2016 final rule). 81 FR 2628. The January 2016 final rule amended the existing DOE test procedure for consumer furnaces and boilers through a number of modifications designed to improve the consistency and accuracy of test results generated using the DOE test procedure and to reduce test burden. 81 FR 2628, 2629-2630 (Jan. 15, 2016).

EPCA established the initial energy conservation standards for consumer furnaces and boilers in terms of AFUE (42 U.S.C. 6295(f)(1)-(3)) and directed DOE to conduct a series of rulemakings to determine whether to amend these standards (42 U.S.C. 6295(f)(4); *see also* 42 U.S.C. 6295(m)). On November 19, 2007, DOE published a final rule in the *Federal Register* (the November 2007 final rule) that revised the energy conservation standards for certain consumer furnace and boiler product classes, with compliance required beginning on November 19, 2015. 72 FR 65136. Following DOE’s adoption of the November 2007 final rule, several

parties jointly sued DOE in the United States Court of Appeals for the Second Circuit (Second Circuit) to invalidate the rule, arguing that the standards adopted did not reflect the maximum improvement in energy efficiency that is technologically feasible and economically justified, as required by EPCA. Petition for Review, *State of New York, et al. v. Department of Energy, et al.*, Nos. 08–0311–ag(L); 08–0312–ag(con) (2d Cir. Filed Jan. 17, 2008). On April 21, 2009, the Second Circuit granted a motion by DOE for voluntary remand (which the petitioners did not oppose) that indicated that DOE would revisit its initial conclusions outlined in the November 2007 final rule in a subsequent rulemaking action but did not vacate the standards adopted in the November 2007 final rule.

On June 27, 2011, DOE published a direct final rule (June 2011 DFR) revising the energy conservation standards for consumer furnaces (as well as consumer central air conditioners and heat pumps) pursuant to the voluntary remand in *State of New York, et al. v. Department of Energy, et al.* 76 FR 37408. The June 2011 DFR amended the existing energy conservation standards for non-weatherized gas furnaces, mobile home gas furnaces, and non-weatherized oil furnaces, and amended the compliance date (but left the existing standards in place) for weatherized gas furnaces. The June 2011 DFR also established electrical standby mode and off mode standards for non-weatherized gas furnaces, mobile home gas furnaces, non-weatherized oil furnaces, mobile home oil furnaces, and electric furnaces. DOE confirmed the standards and compliance dates promulgated in the June 2011 DFR in a notice of effective date and compliance dates published in the *Federal Register* on October 31, 2011. 76 FR 67037.

Following DOE’s adoption of the June 2011 DFR, the American Public Gas Association (APGA) filed a petition for review with the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) to invalidate the DOE rule as it pertained to non-weatherized natural gas furnaces and mobile home gas furnaces. Petition for Review, *American Public Gas Association, et al. v. Department of Energy, et al.*, No. 11-1485 (DC Cir. filed Dec. 23, 2011). On April 24, 2014, the Court granted a motion that approved a settlement agreement that was

reached between DOE, APGA, and the various intervenors in the case, in which DOE agreed to a remand of the non-weatherized gas furnace and mobile home gas furnace portions of the June 2011 DFR in order to conduct further notice-and-comment rulemaking. Accordingly, the Court's order vacated the June 2011 DFR in part (*i.e.*, those portions relating to non-weatherized gas furnaces and mobile home gas furnaces) and remanded to the agency for further rulemaking. The energy conservation standards in the June 2011 DFR for the other consumer furnace product classes (as well as central air conditioners and heat pumps) were left in place.

On December 19, 2007, the Energy Independence and Security Act of 2007 ("EISA 2007"), Pub. L. 110-140, was signed into law. EISA 2007 revised the AFUE requirements and set design requirements for most consumer boiler product classes and required compliance with the amended standards beginning on September 1, 2012. (42 U.S.C. 6295(f)(3)) For gas-fired hot water boilers, oil-fired hot water boilers, and electric hot water boilers, EISA 2007 requires that residential boilers have an automatic means for adjusting water temperature.⁸ EISA 2007 also disallows the use of constant-burning pilot lights in gas-fired hot water boilers and gas-fired steam boilers. EISA 2007 provided an exception for boilers that operate without any need for electricity or any electric connection, electric gauges, electric pumps, electric wires, or electric devices; those boilers were not required to meet the requirements outlined in EISA 2007 for other consumer boilers that require an electrical connection. (42 U.S.C. 6295(f)(3)(A)-(C); 10 CFR 430.32(e)(2)(ii)-(v)) DOE published a final rule technical amendment in the *Federal Register* on July 28, 2008 (July 2008 final rule technical amendment) to codify the energy conservation standard levels, design requirements, and compliance dates for residential boilers outlined in EISA 2007. 73 FR 43611. DOE completed the most recent rulemaking cycle to amend the standards for consumer boilers by publishing a final rule in the *Federal Register* on January 15, 2016 (January 2016 final rule), as required under 42 U.S.C. 6295(f)(4)(C). 81 FR

⁸ The automatic means for adjusting water temperature must ensure that an incremental change in the inferred heat load produces a corresponding incremental change in the temperature of the water supplied by the boiler.

2320. The January 2016 final rule adopted new standby mode and off mode standards for consumer boilers in terms of $P_{W,SB}$ and $P_{W,OFF}$ in addition to amended AFUE energy conservation standards. Compliance with the new and amended standards for consumer boilers was required beginning January 15, 2021. *Id.*

In this NOPR, DOE proposes to require certification and reporting of standby mode and off mode energy consumption for certain product classes, consistent with the energy conservation standards for standby mode and off mode energy consumption adopted in the June 2011 DFR and January 2016 final rule. DOE also proposes to require certification of the type of ignition system for all gas-fired consumer boilers consistent with the prescriptive design requirement set forth in EISA 2007 and subsequently codified by DOE in the July 2008 final rule technical amendment, which applies to all gas-fired consumer boilers.

5. Consumer Water Heaters

Consumer water heaters are included in the list of “covered products” for which DOE is authorized to establish and amend energy conservation standards and test procedures. (42 U.S.C. 6292)(a)(4)) DOE’s energy conservation standards and test procedures for consumer water heaters are currently prescribed at 10 CFR 430.32(d) and 10 CFR part 430, subpart B, appendix E, respectively.

The Energy Efficiency Improvement Act of 2015 (EEIA 2015), Pub. L. 114–11, was enacted on April 30, 2015. The EEIA 2015 amended EPCA, in relevant part, by adding definitions for “grid-enabled water heater” and “activation lock” at 42 U.S.C. 6295(e)(6)(A). These products are intended for use as part of an electric thermal storage or demand response program. Among the criteria that define a “grid-enabled water heater” is an energy-related performance standard that is either an energy factor (EF) specified by a formula set forth in the statute, or an equivalent alternative standard that DOE may prescribe. (42 U.S.C. 6295(e)(6)(A)(ii)(III)(aa) and (bb)) In addition, the EEIA 2015 amendments to EPCA also

directed DOE to require reporting on shipments and activations of grid-enabled water heaters and to establish procedures, if appropriate, to prevent product diversion for non-program purposes, and to publish related results. (42 U.S.C. 6295(e)(6)(C)-(D)) EEIA 2015 also required DOE to treat shipment data reported by manufacturers as confidential business information. (42 U.S.C. 6295(e)(6)(C)(iii)) On August 11, 2015, DOE published a final rule (August 2015 final rule) in the *Federal Register* that added definitions for “grid-enabled water heater” and “activation lock” to 10 CFR 430.2 and energy conservation standards for grid-enabled water heaters to 10 CFR 430.32(d). 80 FR 48004, 48009-48010. The August 2015 final rule did not establish provisions to require the reporting of shipments by manufacturers.

In this NOPR, DOE proposes to require each manufacturer to report annual shipments of their grid-enabled water heaters and to treat the annual shipments of grid-enabled water heaters as confidential business information.

6. Dishwashers

Dishwashers are included in the list of “covered products” for which DOE is authorized to establish and amend test procedures and energy conservation standards. (42 U.S.C. 6292)(a)(6)) DOE’s test procedures for dishwashers are currently prescribed at 10 CFR 430.23(c) and appendix C1 to subpart B of 10 CFR part 430 (“appendix C1”). DOE’s energy conservation standards for dishwashers are currently prescribed at 10 CFR 430.32(f).

In a direct final rule published on May 30, 2012 (“May 2012 direct final rule”), DOE amended the energy conservation standards and water use standards for dishwashers consistent with the levels submitted in a petition by groups representing manufacturers, energy and environmental advocates, and consumer groups. 77 FR 31918, 31919. Compliance with the standards established in the May 2012 direct final rule was required beginning May 30, 2013. *Id.* at 77 FR 31918. In a final determination published on December 13, 2016, DOE concluded that the amended energy conservation standards would not be economically justified at any level

above the standards established in the May 2012 direct final rule, and therefore determined not to amend the standards. 81 FR 90072.

DOE most recently amended its dishwasher test procedures in a final rule published October 31, 2012, which established appendix C1. 77 FR 65942, 65947. Appendix C1 is currently required to demonstrate compliance with the energy conservation standards prescribed at 10 CFR 430.32(f). The current version of the DOE test procedure includes provisions for determining estimated annual energy use and per-cycle water consumption, among other metrics. (10 CFR 430.23(c))

In this NOPR, DOE proposes adding a certification reporting requirement to ensure that any assessment or enforcement testing pursuant to 10 CFR 429.104 and 429.110, respectively, would be performed using the same detergent used by the manufacturer for certifying compliance with the energy conservation standards.

7. Commercial Clothes Washers

CCWs are included in the list of “covered equipment” for which DOE is authorized to establish and amend energy conservation standards and test procedures. (42 U.S.C. 6311(1)(H)) EPCA requires the test procedures for CCWs to be the same as those established for consumer (residential) clothes washers (“RCWs”). (42 U.S.C. 6314(a)(8)) DOE’s test procedures for CCWs are currently prescribed at 10 CFR 431.154 and reference DOE’s test procedure for RCWs currently prescribed at appendix J2 to subpart B of 10 CFR part 430 (“appendix J2”).⁹ DOE’s energy conservation standards for CCWs are prescribed at 10 CFR 431.156(b).

In a final rule published on December 15, 2014, DOE amended the energy conservation standards and water standards for CCWs. 79 FR 74492 (“December 2014 Standards Final

⁹ The test procedures for CCWs prescribed at 10 CFR 431.154 also reference appendix J1 to subpart B of 10 CFR part 430 (“appendix J1”). For CCWs, Appendix J1 is required to demonstrate compliance with energy conservation standards applicable to CCWs manufactured before January 1, 2018. Any representations of compliance with the standards applicable to CCWs manufactured on or after January 1, 2018 must be based upon results generated using appendix J2.

Rule”). Compliance with the standards established in the December 2014 Standards Final Rule was required beginning January 1, 2018. *Id.*

DOE most recently amended its CCW test procedures in a final rule published December 3, 2014. 79 FR 71624 (“December 2014 TP Final Rule”). The December 2014 TP Final Rule amended 10 CFR 431.152 to provide definitions for integrated water factor (“IWF”) and modified energy factor value calculated using appendix J2 (“MEF_{J2}”)—the metrics on which the current energy conservation standards are based— among other minor changes.

In this NOPR, DOE proposes to require reporting model characteristics used for determining applicable standards and for conducting product-specific enforcement provisions for clothes washers (which includes CCWs), and to specify rounding instructions for each newly reported value.

8. Battery Chargers

Battery chargers are “covered products” for which DOE is authorized to establish and amend energy conservation standards and test procedures. (42 U.S.C. 6295(u)) DOE’s energy conservation standards for battery chargers are currently prescribed at 10 CFR 430.32(z). The test procedures for battery chargers are currently prescribed at 10 CFR part 430, subpart B appendix Y, “Uniform Test Method for Measuring the Energy Consumption of Battery Chargers” (“appendix Y”). The sampling and reporting requirements for battery chargers are set forth in 10 CFR 429.39.

On May 20, 2016, DOE published a final rule that established the test procedure for battery chargers at appendix Y. 81 FR 31827. In that final rule, DOE updated the battery selection criteria for multi-voltage, multi-capacity battery chargers; harmonized the instrumentation resolution and uncertainty requirements with the second edition of the International Electrotechnical Commission (“IEC”) 62301 standard for measuring standby power; defined and excluded back-up battery chargers from the testing requirements; outlined

provisions for conditioning lead acid batteries; specified sampling and certification requirements; and corrected typographical errors in the current test procedure. *Id.*

On June 13, 2016, DOE established the current energy conservation standards for battery chargers, expressed as the maximum allowable unit energy consumption (“kWh/yr”) as a function of battery energy and voltage. 81 FR 38266.

Consistent with these prior regulatory amendments affecting battery chargers, this proposal would establish an annual filing date by which manufacturers would be required to submit the required certification information to DOE.

9. Dedicated-Purpose Pool Pumps

DPPPs are a subset of pumps, which are included in the list of “covered equipment” for which DOE is authorized to establish and amend energy conservation standards and test procedures. (42 U.S.C. 6311(1)(A)) DOE’s test procedures for DPPPs are currently prescribed at 10 CFR 431.464(b) and DOE’s energy conservation standards for DPPPs are prescribed at 10 CFR 431.465(f)-(h). The certification and reporting requirements for DPPPs are set forth in 10 CFR 429.59(b)(2)(iv)-(v) and (b)(3)(iv).

DOE’s test procedure for determining DPPP energy efficiency was established in a final rule published on August 7, 2017. 82 FR 36858 (“August 2017 Final Rule”). The test procedure reflects the consensus of the Appliance Standards Rulemaking Federal Advisory Committee (ASRAC) negotiated rulemaking working group for DPPPs. (Docket No. EERE-2015-BT-STD-0008, Nos. 51 and 82) The August 2017 Final Rule also included certification and enforcement provisions for DPPPs.

In this NOPR, DOE proposes to clarify the certification reporting requirements for DPPPs in 10 CFR 429.59(b)(2)(iv) and (b)(3)(iv), in order to resolve potential confusion as to the scope of these provisions.

II. Synopsis of the Notice of Proposed Rulemaking

In this NOPR, DOE proposes to update the certification reporting requirements as follows:

- (1) Align the CFLK certification reporting requirements at 10 CFR 429.33 with the CFLK energy conservation standards relating to: (a) efficacy for light sources in CFLKs; (b) lumen maintenance, lifetime, and rapid cycle stress testing for medium screw base CFLs in CFLKs; (c) electronic ballasts for pin-based fluorescent lamps in CFLKs; (d) test sample size; and (e) kind of lamp.
- (2) Include rated voltage and lamp diameter for IRLs and initial lumen output for GSILs in certification reports to determine applicable energy conservation standards under the GSIL and IRL certification reporting requirements at 10 CFR 429.27. Additionally, for IRLs include CRI in certification reports, an existing minimum energy conservation requirement for these products.
- (3) Align the ceiling fan certification reporting requirements at 10 CFR 429.32 with existing energy conservation standards established in the January 2017 CF ECS Final Rule and the Energy Act of 2020. Additionally, specify rounding requirements for CFM/W and CFEI. Finally, add a reporting requirement for standby power consumption for small-diameter ceiling fans.
- (4) Align the consumer furnace and boiler certification reporting requirements at 10 CFR 429.18 with the existing energy conservation standards by requiring reporting of standby mode and off mode energy consumption for classes with existing standby mode and off mode energy conservation standards, and clarifying that the requirement for certifying the type of ignition system applies to all gas-fired boilers (rather than just cast iron sectional gas-fired boilers).
- (5) Add certification provisions at 10 CFR 429.17 to require water heater manufacturers to report the number of annual shipments of grid-enabled water heaters.

- (6) Add certification provisions at 10 CFR 429.19 to require dishwasher manufacturers to indicate use of a new detergent formulation that replaces the detergent formulation currently specified, which has been discontinued.
- (7) Add certification provisions at 10 CFR 429.46 to require CCW manufacturers to report model characteristics used for determining applicable standards and for conducting product-specific enforcement provisions; and specify rounding instructions for these reported values.
- (8) Establish an annual filing date in 10 CFR 429.12, by which manufacturers of battery chargers would be required to submit the required certification information to DOE.
- (9) Clarify the certification reporting requirements in 10 CFR 429.59 for DPPP.

DOE's current and proposed reporting requirements, as well as the reason for the proposed change, are summarized in Table II.1 of this document.

Table II.1 Summary of Proposed Changes to Certification Reporting Requirements Relative to Current Certification Reporting Requirements

Current DOE Certification Reporting Requirements	Proposed Certification Reporting Requirements	Attribution
For CFLKs, no reporting requirement for efficacy for a lamp and integrated SSL circuitry.	Add reporting requirement for efficacy in lumens per watt (lm/W) and for lumen output in lumens (to determine the minimum efficacy standard) for a lamp and integrated SSL circuitry in a CFLK.	Required to verify whether the information provided is consistent with the certifier's statement of compliance with January 21, 2020 energy conservation standards.
For CFLKs, no reporting requirements for lumen maintenance at 1,000 hours, lumen maintenance at 40 percent of lifetime, the results of rapid cycle stress testing, and lifetime for medium screw base CFLs.	Add reporting requirements to specify the lumen maintenance at 1,000 hours in percent, lumen maintenance at 40 percent of lifetime in percent, number of units passing rapid cycle stress testing, and the lifetime in hours for medium screw base CFLs in a CFLK.	Required to verify whether the information provided is consistent with the certifier's statement of compliance with January 21, 2020 energy conservation standards.
For CFLKs, no reporting requirement specifying that a CFLK with pin-based sockets for fluorescent lamps have an electronic ballast.	Add reporting requirement to provide a declaration that CFLKs with pin-based sockets for fluorescent lamps have an electronic ballast.	Required to verify whether the information provided is consistent with the certifier's statement of compliance with January 21, 2020 energy conservation standards.
For CFLKs, no reporting requirement specifying that a CFLK is packaged with lamps to fill all sockets.	Add reporting requirement to provide a declaration that CFLKs are packaged with lamps to fill all sockets.	Required to verify whether the information provided is consistent with the certifier's statement of compliance

		with January 21, 2020 energy conservation standards.
For CFLKs, no reporting requirement for lab accreditation.	Add requirement for declaration that lamps packaged with CFLKs were tested by an International Laboratory Accreditation Cooperation (“ILAC”) accredited laboratory as required under 10 CFR 430.25	Required to verify whether the information provided is consistent with the certifier’s statement of compliance with laboratory accreditation requirements in 10 CFR 430.25.
For CFLKs, no reporting requirement for test sample size or kind of lamp for basic model of lamp.	Add a reporting requirement to provide the test sample size and kind of lamp for each basic model of lamp in the CFLK.	Required to verify whether the information provided is consistent with the certifier’s statement of compliance with sampling requirements in 10 CFR 429.12(b).
For GSILs and IRLs, does not require reporting all metrics that aid in ensuring compliance.	Add reporting requirements for rated voltage, lamp diameter, and CRI for IRLs and initial lumen output for GSILs.	Required to verify whether the information provided is consistent with the certifier’s statement of compliance with existing standards or product class characterizations.
For ceiling fans, reporting requirement includes number of speeds and design requirement declaration.	Add reporting requirements for small diameter ceiling fans to include blade span, ceiling fan efficiency in CFM/W, declarations regarding multi-head fans along with additional product-specific information for small-diameter ceiling fans: standby power, blade edge thickness (in), airflow (CFM) at high speed, blade RPM at high speed, and the distance (in) between the ceiling and the lowest point on the fan blades (in both hugger and standard configurations for multi-mount fans).	Required to verify whether the information provided is consistent with the certifier’s statement of compliance with January 21, 2020 energy conservation standards to reflect the January 2017 CF ECS Final Rule.
For ceiling fans, reporting requirement includes number of speeds and design requirement declaration.	Add reporting requirements for large diameter ceiling fans to include CFEI for high speed and 40 percent speed or the nearest speed that is not less than 40 percent speed.	Required to verify whether the information provided is consistent with the certifier’s statement of compliance with January 21, 2020 energy conservation standards to reflect the Energy Act of 2020.
For ceiling fans, no rounding requirements for the small diameter or large diameter ceiling fan efficiencies	Amend 10 CFR 429.32 to specify that represented values of efficiency must be rounded to the nearest whole number for small diameter ceiling fans in terms of CFM/W and to the nearest hundredth for large diameter ceiling fans in terms of CFEI.	Required to verify whether the information provided is consistent with the certifier’s statement of compliance with January 21, 2020 energy conservation standards to reflect the January 2017 CF ECS Final Rule and the Energy Act of 2020.
For consumer boilers, non-weatherized oil-fired furnaces (including mobile home furnaces) and electric furnaces, no reporting requirement for standby mode and off mode energy consumption.	Add reporting requirement for standby mode and off mode energy consumption of consumer boilers, non-weatherized oil-fired furnaces (including mobile home furnaces), and electric furnaces.	Required to verify whether the information provided is consistent with the certifier’s statement of compliance with May 1, 2013 energy conservation standards for non-weatherized oil-fired furnaces (including mobile home furnaces) and electric furnaces, and the January 15, 2021 energy conservation standards for consumer boilers.
For gas-fired boilers, reporting requirement to certify type of ignition system applies only to cast iron sectional gas-fired boilers.	Expand reporting requirement for type of ignition system to apply to all gas-fired boilers	Required to verify whether the information provided is consistent with the certifier’s statement of compliance with September 1, 2012 energy conservation standards, which includes a prescriptive requirement that disallows a constant-burning pilot ignition for all gas-fired boilers.

For grid-enabled water heaters, no requirement for manufacturers to submit annual shipment data.	Require manufacturers to submit annual shipment data for grid-enabled water heaters at 10 CFR 429.17.	Required by EPCA under 42 U.S.C. 6295(e)(6)(C)(i)
For testing dishwashers, no reporting requirement for certification based on testing with an alternate detergent in place of the one currently specified for use, which has been discontinued.	Require manufacturers to report use of the new detergent formulation that replaces the detergent formulation currently specified.	Required to ensure that any assessment or enforcement testing would be performed using the same detergent used by the manufacturer for certifying compliance with the energy conservation standards.
For CCWs, does not require reporting of clothes container capacity, loading axis, or remaining moisture content value.	Add reporting requirements for clothing container capacity, type of loading (top-loading or front-loading), and remaining moisture content, including applicable rounding instructions for these reported values.	Required to verify whether the information provided is consistent with the certifier's statement of compliance with January 1, 2018 energy conservation standards and to conduct product-specific enforcement provisions.
For battery chargers, reporting requirements are included in 10 CFR 429.39, but no annual filing date is specified in 10 CFR 429.12.	Establish an annual filing date of September 1, by which manufacturers would be required to submit required reporting information to DOE.	Required to ensure certification information is current on an annual basis, consistent with the requirements for other covered products and equipment.
For DPPP, includes certification reporting requirements for certain models that may cause confusion as to the scope of these provisions.	Clarify that reporting requirements apply only to models subject to energy conservation standards.	Eliminate possible misunderstanding that these reporting requirements apply to models that are not subject to energy conservation standards, when in fact these requirements do not apply to such models, per the current provisions in §429.12(a).

DOE is not proposing amendments to the test procedures or energy conservation standards for CFLs, GSILs, IRLs, ceiling fans, consumer furnaces and boilers, consumer water heaters, dishwashers, CCWs, battery chargers, or DPPPs.

III. Discussion

Certification of compliance to DOE is a mechanism that helps manufacturers understand their obligations for distributing models of covered products and equipment that are subject to energy conservation standards. Certification reports include characteristics of covered products or equipment used to determine which standard applies to a given basic model, and they also help DOE identify models and/or regulated entities that may not be in compliance with the applicable regulations.

For the products and equipment addressed in this NOPR, DOE has identified areas in which the certification reporting requirements are not consistent with the information required to verify whether the information provided is consistent with the certifier's statement of compliance with current energy conservation standards. DOE is proposing amendments to the certification and reporting provisions for these products and equipment, as discussed in the following sections, to ensure reporting that is consistent with currently applicable energy conservation standards and to ensure DOE has the information necessary to determine the appropriate classification of products for the application of standards. In addition to the specific proposals discussed in the following sections, DOE is also proposing minor amendments to ensure consistency among terms used throughout DOE's certification and reporting provisions.

A. Ceiling Fan Light Kits

1. Scope of Applicability

This NOPR applies to CFLKs, which are products designed to provide light from a ceiling fan and can be either: (1) integral, such that the equipment is attached to the ceiling fan prior to the time of retail sale; or (2) attachable, such that at the time of retail sale the equipment is not physically attached to the ceiling fan, but may be included inside the ceiling fan packaging at the time of sale or sold separately for subsequent attachment to the fan. 10 CFR 430.2 (42 U.S.C. 6291(50)). In the December 2015 CFLK TP Final Rule, DOE revised its interpretation of the CFLK definition to state that the requirement for a CFLK to be "designed to provide light" includes all light sources in a CFLK, including accent lighting. 80 FR 80209, 80214. DOE seeks comment on whether CFLKs are still being distributed in commerce that were manufactured prior to January 21, 2020, and therefore, DOE should retain compliance requirements for these standards.

2. Reporting

Under the existing requirements in 10 CFR 429.33(b), manufacturers must report: (1) system efficacy and rated wattage for CFLKs with medium screw base lamps; (2) system efficacy, rated wattage, and lamp length for CFLKs with pin-based fluorescent lamps; and (3) rated wattage and number of individual sockets for CFLKs with any other socket type. The existing reporting requirements also require a declaration that CFLKs with any other socket type (*i.e.*, not medium screw base or pin-based) meet the applicable design requirements. These requirements provide for certifying compliance with the January 1, 2007 standards. DOE is proposing to replace these requirements and align the reporting requirements with the January 21, 2020 standards and proposing general certification requirements for CFLKs. DOE discusses these proposed updates in the sections as follows.

a. Efficacy

The January 21, 2020 standards require that all lamps and integrated SSL packaged with CFLKs meet certain efficacy standards based on the lumens of the lamp. To reflect the January 21, 2020 standards, DOE proposes to require a certification report to identify each basic model of lamp or integrated SSL circuitry packaged with the CFLK basic model and to provide the corresponding lumen output in lumens and the efficacy in lumens per watt (“lm/W”) for each lamp/SSL basic model. The inclusion of basic model number, associated lumen output, and efficacy in the certification report provides necessary data to determine whether the basic model of the lamp in the CFLK complies with the January 21, 2020 standards requiring a minimum efficacy based on the lumens of the lamp.

The current test procedures and reporting requirements for various lighting products do not all use the same terms for lumen output and efficacy (*e.g.*, lumen output, average lumen output, initial lumen output, rated lumen output, efficacy, lamp efficacy, initial lamp efficacy, system efficacy). DOE therefore proposes to use the common terms “lumen output” and “efficacy” to identify the required values, and to make conforming revisions to the rounding requirements at 10 CFR 429.33(c).

DOE seeks comments on requiring the reporting of lumen output and efficacy to certify compliance to January 21, 2020 standards.

b. Lumen Maintenance, Lifetime, and Rapid Cycle Stress Test

Both the January 1, 2007 standards and January 21, 2020 standards include, for medium screw base CFLs packaged with a CFLK, minimum requirements for lumen maintenance at 1,000 hours, lumen maintenance at 40 percent of lifetime, lifetime, and the number of units in the tested sample that must pass the rapid cycle stress test. 10 CFR 430.32(s)(3)(i) and (s)(6)(i). Currently, the reporting requirements do not reflect these requirements for CFLs packaged with CFLKs. DOE proposes to require these values to verify whether the information provided is consistent with the certifier's statement of compliance with the January 21, 2020 standards. Specifically, for CFLKs packaged with a medium screw base CFL, for each basic model of CFL, DOE proposes to require reporting lumen maintenance at 1,000 hours and lumen maintenance at 40 percent of lifetime in percentages; lifetime in hours; and the number of CFL units that pass rapid cycle stress testing. Similar to DOE's reporting requirements for CFLs sold individually (see 10 CFR 429.35), DOE proposes to allow certification of lumen maintenance at 40 percent of lifetime, lifetime, and rapid cycle stress testing of a medium screw base CFL in a CFLK to be based on estimations until testing is complete. This would allow new basic models of CFLKs with medium screw based CFLs to be distributed prior to completion of lifetime testing.

DOE seeks comment on reporting lumen maintenance at 1,000 hours and at 40 percent of lifetime, lifetime, and the rapid cycle stress test results for medium screw base CFLs in CFLKs. DOE seeks comment on allowing estimates for lumen maintenance at 40 percent of lifetime, lifetime, and the rapid cycle stress test result.

c. Design Requirement Declarations

The January 21, 2020 standards continue to require that CFLKs with pin-based sockets for fluorescent lamps must use an electronic ballast. 10 CFR 430.32(s)(6)(ii). The current certification reporting requirements require for CFLKs with any socket type other than medium

screw base or pin base a declaration that the basic model meets the applicable EPCA design requirement¹⁰ and that the features that have been incorporated into the ceiling fan light kit meet the applicable design requirement (*e.g.*, circuit breaker, fuse, ballast). 10 CFR 429.33(b)(3). DOE proposes to make this declaration more specific to existing requirements and require that, for a CFLK with a pin-based socket for a fluorescent lamp, the manufacturer provide in the certification report a declaration that that such a CFLK has an electronic ballast. This will allow DOE to verify whether the information provided is consistent with the certifier's statement of compliance with the January 21, 2020 standard requirement that a pin-based socket fluorescent lamp in a CFLK have an electronic ballast. 10 CFR 429.12(b).

The January 21, 2020 standards also continue to require that, for all lamp types, the CFLK be packaged with lamps to fill all of the sockets. 10 CFR 430.32(s)(6). DOE proposes to require a declaration that the CFLK is packaged with lamps to fill all sockets of all lamp types (*e.g.*, candelabra base, medium screw base, pin-based). The declaration provides DOE with data indicating whether the manufacturers have addressed the January 21, 2020 standard requirement that for all lamp types the CFLK is packaged with lamps to fill all of the sockets.

DOE seeks comment on requiring a declaration that pin-based fluorescent lamps in CFLKs have an electronic ballast. DOE also seeks comment on requiring a declaration that the CFLK are packaged with lamps sufficient to fill all sockets.

d. Basic Model, Lamp Type, and Sample Size Requirements

In this NOPR, DOE is also proposing certain certification reporting requirements for CFLKs to provide further specificity as to what is required to be reported. DOE is proposing to add language in 10 CFR 429.33(b) stating that manufacturers must provide certification values for each basic model of lamp included in the basic model of CFLK under test. This will allow DOE to use the appropriate certification values to verify whether the information provided is

¹⁰ CFLKs that meet the January 21, 2020 efficacy standards are presumed to meet the EPCA-mandated 190 W limit requirement. See 42 U.S.C. 6295 (ff)(4)(C) and 10 CFR 430.32(s)(5).

consistent with the certifier's statement of compliance with January 21, 2020 standards. If the same basic model of lamp is used in multiple CFLK basic models, manufacturers may use the same set of test data for that basic model of lamp to show compliance for each CFLK basic model in which it is included.

DOE is also proposing manufacturers provide the test sample size and kind of lamp for each basic model of a lamp and/or each basic model of integrated SSL circuitry packaged with a basic model of CFLK. Because pin-based socket fluorescent lamps and medium-based socket CFLs in CFLKs are lamp types subject to additional standards, the lamp type of the basic model in the CFLK is necessary to determine which product class the basic model falls into.

Additionally, DOE is proposing that manufacturers provide, if applicable, a declaration that each basic model of lamp packaged with the basic model of CFLK was tested by an ILAC accredited laboratory. Lamps identified in 10 CFR 430.25 must be tested by laboratories with these accreditation requirements, and this declaration will allow DOE to verify whether the information provided is consistent with the certifier's statement of compliance with this requirement. DOE seeks comment on the other proposed amendments to the certification reporting requirements.

e. Rounding Requirements

DOE is proposing rounding requirements for the certification reporting requirements proposed in this notice. DOE is proposing that lumen output be rounded to three significant digits; lumen maintenance at 1,000 hours and at 40 percent of lifetime be rounded to the nearest tenth of a percent; and lifetime be rounded to the nearest whole hour. Currently, DOE specifies that any represented value of initial lamp efficacy, system efficacy or luminaire efficacy be rounded to the nearest tenth. DOE is proposing to simplify this to state any represented value of efficacy be rounded to the nearest tenth.

3. Reporting Costs and Impacts

In this NOPR, DOE proposes to align CFLK certification reporting requirements with the energy conservation standard requirements applicable to CFLKs manufactured on and after January 21, 2020.

For CFLKs with sockets for medium screw base lamps, manufacturers currently report two values (*i.e.*, efficacy, wattage), but would report four to nine values (*e.g.*, efficacy, lumen output, test sample size, kind of lamp, a declaration of ILAC accreditation, lumen maintenance at 40 percent of lifetime, lumen maintenance at 1,000 hours, lifetime, units passing rapid cycle stress test), depending on the kind of lamps packaged with the CFLK, if the proposed amendments are adopted. For CFLKs with pin-based sockets for fluorescent lamps, manufacturers currently report three values (*i.e.*, efficacy, wattage, length of lamp) and would report five values (*i.e.*, efficacy, lumen output, test sample size, kind of lamp, and a declaration of ILAC accreditation), if the proposed amendments are adopted. For CFLKs with lamps of other socket types, manufacturers currently report two values (*i.e.*, wattage, number of individual sockets), but would report five values (*i.e.*, efficacy, lumen output, test sample size, kind of lamp, and a declaration of ILAC accreditation), if the proposed amendments are adopted.

DOE has tentatively determined that these proposed amendments would not impose additional costs for manufacturers because manufacturers of CFLKs are already submitting certification reports to DOE and should have readily available the information that DOE is proposing to collect as part of this rulemaking. DOE does not believe the revised reporting requirements will cause any measurable change in reporting burden or hours as compared to what CFLK manufacturers are currently doing today. DOE requests comment on the certification reporting costs of the amendments proposed for CFLKs.

B. GSILs and IRLs

1. Scope of Applicability

This NOPR applies to GSILs and IRLs. DOE defines GSILs as a standard incandescent or halogen type lamp intended for general service applications; has a medium screw base; has a

lumen range between 310 – 2600 lumens or, in the case of a modified spectrum lamp, between 232 – 1,950 lumens; and is capable of being operated at a voltage range at least partially within 110 -130 volts. The GSIL definition does not include certain lamp types (see 10 CFR 430.2). 10 CFR 430.2. DOE defines IRLs as any lamp in which light is produced by a filament heated to incandescence by an electric current; contains an inner reflective coating on the outer bulb to direct the light; is not colored; is not designed for rough or vibration service applications; is not an R20 short lamp; has an R, PAR, ER, BR, BPAR,¹¹ or similar bulb shapes with an E26 medium screw base; has a rated voltage or voltage range that lies at least partially in the range of 115 - 130 volts; has a diameter that exceeds 2.25 inches; and has a rated wattage that is 40 watts or higher. 10 CFR 430.2.

2. Reporting

Under the existing requirements in 10 CFR 429.27(b)(2)(ii) for IRLs manufacturers must report: (1) the testing laboratory's International Laboratory Accreditation Cooperation (“ILAC”) accreditation body's identification number or other approved identification assigned by the ILAC accreditation body; (2) production dates of the units tested; (3) the 12-month average lamp efficacy in lumens per watt (lm/W), and (4) lamp wattage (W).

EISA 2007 established a CRI requirement for IRLs.¹² In the June 2021 NOPR, DOE is proposing to include a test method for determining CRI of IRLs. 86 FR 29888, 29902. To verify whether the information provided is consistent with the certifier’s statement of compliance with standards, DOE is proposing to require the reporting of CRI for IRLs. Additionally, for IRLs DOE is proposing to require the reporting of rated voltage and lamp diameter. Because rated voltage and lamp diameter are used to determine the applicable energy conservation standards for IRLs, collecting this information helps DOE evaluate whether a basic model meets

¹¹ Reflector (“R”), parabolic aluminized reflector (“PAR”), elliptical reflector (“ER”), bulged reflector (“BR”), bulged parabolic aluminized reflector (“BPAR”).

¹² Section 321(a) of EISA 2007 established CRI requirements for lamps that are intended for a general service or general illumination application (whether incandescent or not); have a medium screw base or any other screw base not defined in ANSI C81.61-2006; are capable of being operated at a voltage at least partially within the range of 110 to 130 volts; and are manufactured or imported after December 31, 2011.

the appropriate energy conservation standard requirements (see 10 CFR 430.32(n)(6)). DOE is proposing to add rated voltage, lamp diameter and CRI for IRLs only for annual filing certification reporting and not for the new basic model initial certification reporting. In the June 2021 NOPR, DOE is proposing to remove the requirement of submitting new basic model initial certification reports for IRLs. 86 FR 29888, 29905. Hence, in this NOPR, DOE does not propose to make changes to the initial certification reporting for IRLs. If the proposed removal of initial certification reports for IRLs is not adopted, DOE will add these values to the initial certification reporting requirements. DOE seeks comments on requiring the reporting of CRI to certify compliance with existing energy conservation standard requirements for IRLs. DOE also seeks comment on requiring the reporting of lamp diameter and rated voltage to help determine the applicable energy conservation standard for IRLs.

Under the existing requirements in 10 CFR 429.27(b)(2)(iii) for GSILs manufacturers must report: (1) the testing laboratory's ILAC accreditation body's identification number or other approved identification assigned by the ILAC accreditation body; (2) production dates of the units tested; (3) the 12-month average maximum rate wattage in watts ("W"); (4) the 12-month average minimum rated lifetime (hours), and (5) the 12-month average CRI. DOE is proposing to also require the reporting of initial lumen output for GSILs because the lamp lumens help DOE evaluate whether a basic model meets the appropriate energy conservation standard requirements (see 10 CFR 430.32(x)). DOE seeks comment on requiring the reporting of initial lumen output to help determine the applicable energy conservation standard for GSILs.

3. Reporting Costs and Impacts

In this NOPR, DOE proposes to align IRL certification reporting requirements with the existing energy conservation standard requirements. Additionally, it proposes to include reporting requirements for GSILs and IRLs that will help DOE determine applicable energy conservation standards for these products.

For IRLs, manufacturers currently certify four values (*i.e.*, ILAC accreditation, production dates, lamp efficacy, and lamp wattage), but would report seven values with the three additional proposed reporting values (*i.e.*, CRI, lamp diameter, rated voltage), if the proposed amendments are adopted. For GSILs, manufacturers currently report five values (*i.e.*, ILAC accreditation, production dates, wattage, lifetime, and CRI), but would report six values with the one additional proposed reporting value (*i.e.*, lumens), if the proposed amendments are adopted. Note that in the June 2021 NOPR, DOE is proposing to remove the reporting of production dates for IRLs and GSILs. 86 FR 29888, 29905.

DOE has tentatively determined that these proposed amendments would not impose additional costs for manufacturers because manufacturers of IRLs and GSILs are already submitting certification reports to DOE. Hence, manufacturers should have readily available the information that DOE is proposing to collect as part of this rulemaking because it is necessary to determine applicable energy conservation standards or to meet existing statutory requirements. DOE does not believe the revised reporting requirements will cause any measurable change in reporting burden or hours as compared to what manufacturers of IRLs and GSILs are currently doing today. DOE requests comment on the certification and reporting costs of the amendments proposed for IRLs and GSILs and whether it will result in an increase in reporting burden.

C. Ceiling Fans

1. Scope of Applicability

The Energy Policy and Conservation Act defines “ceiling fan” as “a nonportable device that is suspended from a ceiling for circulating air via the rotation of fan blades.” (42 U.S.C. 6291(49)) DOE codified the statutory definition in 10 CFR 430.2. In the July 2016 Final Rule, DOE stated that the test procedure applies to any product meeting this definition, including fans designed for applications where large airflow volume may be needed and highly decorative fans. 81 FR 48620, 48622. DOE stated, however, that the ceiling fan test procedure does not apply to

the following fans: belt-driven ceiling fans, centrifugal ceiling fans, oscillating ceiling fans, and ceiling fans whose blades' plane of rotation cannot be within 45 degrees of horizontal. *Id.*

2. Reporting

Ceiling fan manufacturers must submit certification reports for ceiling fan basic models before they are distributed in commerce. 10 CFR 429.12. The current requirements for certification reports for ceiling fans correspond to the design requirements specified in EPCA. (See 42 U.S.C. 6295(ff)(1)) These requirements are set forth at 10 CFR 429.32(b), which requires reporting of the number of speeds within the ceiling fan controls, and a declaration that the manufacturer has incorporated the applicable design requirements. The current certification requirements do not reflect the amended energy conservation standards adopted in the January 2017 CF ECS final rule or the amended standards for large-diameter ceiling fans adopted by Congress in the Energy Act of 2020. 82 FR 6826; 42 U.S.C. 6295(ff)(6)(C)(i), as codified; 86 FR 28469.

a. Small-Diameter Ceiling Fan Requirements

In the September 2019 NOPR, DOE proposed to update the reporting requirements for ceiling fans to include product-specific information that would be required to certify compliance with the amended energy conservation standards established in January 2017 CF ECS final rule. 84 FR 51440, 51450. DOE did not finalize the proposed requirements from the September 2019 NOPR and is revisiting the certification and rounding requirements in this NOPR with a new proposal.

Product-specific information is necessary to determine the product class and minimum allowable ceiling fan efficiency that would be required to certify compliance with current energy conservation standards. For small-diameter ceiling fans, the product class (*i.e.*, very small-diameter, standard, hugger, high-speed small-diameter) is determined using blade span (in), blade edge thickness (in), airflow (CFM) at high speed, blade revolutions per minute ("RPM") at high speed, and the represented distance (in) between the ceiling and the lowest point on the fan

blades. Further, identification of whether a small-diameter ceiling fan is a multi-head ceiling fan is necessary to determine applicable standards. Specifically, a multi-head ceiling fans require calculating ceiling fan efficiency differently than other small-diameter ceiling fans by including the airflow and power consumption of all fan heads (see section 4.1.1 of appendix U).

Accordingly, DOE proposes to require that certification reports include the following public product-specific information for each ceiling fan basic model: (1) blade span in inches; (2) ceiling fan efficiency in CFM/W; and (3) a declaration whether the fan is a multi-head ceiling fan.

For each ceiling fan basic model, DOE also proposes to require additional product-specific information, including: (1) blade edge thickness (in), airflow (CFM) at high speed, and blade revolutions per minute (“RPM”) at high speed; and (2) for LSSD ceiling fans, the distance (in) between the ceiling and the lowest point on the fan blades. Manufacturers are already required to determine these values as part of the current test procedure for ceiling fans and would be required to use these values to determine which amended energy conservation standards apply to their basic models.

Further, DOE proposes to require reporting of standby power consumption (in watts) for small-diameter ceiling fans. DOE notes that standby power consumption is already required to be measured in section 3.6 of appendix U and is an input into the calculation of ceiling fan efficiency in section 4 of appendix U. Therefore, DOE determines that the reporting of standby power for these ceiling fans will not result in an increase in reporting burden for manufacturers.

b. Large-Diameter Ceiling Fan Requirements

The LDCF product class is identified based on blade span (in) only. In addition, consistent with the Energy Act of 2020, LDCFs must now meet two separate standards based on the CFEI metric, with one standard based on operation of the fan at high speed and a second standard based on operation of the fan at 40 percent speed or the nearest speed that is not less than 40 percent speed. (See 42 U.S.C. 6295(ff)(6)(C)(i)(II), as codified) Accordingly, DOE

proposes to amend the reporting requirements for LDCFs to require reporting blade span in inches, CFEI for high speed, and CFEI for 40 percent speed or the nearest speed that is not less than 40 percent speed.

c. Rounding Requirements

DOE proposes amendments to 10 CFR 429.32 to specify that represented values are to be determined consistent with the test procedures in appendix U and to specify rounding requirements for represented values. DOE proposes that manufacturers round any represented value of ceiling fan efficiency for small diameter ceiling fans, expressed in CFM/W, to the nearest whole number. Additionally, for large diameter fans, DOE proposes to specify that any represented value of CFEI must be rounded to the nearest hundredth of a CFEI.

DOE seeks comment on the proposed updated reporting requirements for small-diameter ceiling fans and LDCFs.

3. Reporting Costs and Impacts

In this NOPR, DOE proposes to align ceiling fan certification reporting requirements with the energy conservation standard requirements applicable to ceiling fans manufactured on and after January 21, 2020, and with the May 2021 Technical Amendment.

For all ceiling fans, manufacturers currently report two fields (*i.e.*, the number of speeds within the ceiling fan controls and a declaration that the manufacturer has incorporated the applicable design requirements). 10 CFR 429.32(b)(2). For small-diameter ceiling fans, manufacturers would be required to additionally report five to eight fields (*i.e.*, blade span, CFM/W, standby power, a declaration whether the fan is a multi-head ceiling fan, blade edge thickness, CFM and RPM at high speed, and the represented distance between the ceiling and the lowest point on the fan blades), if the proposed amendments are adopted. For large-diameter ceiling fans, manufacturers would be required to additionally report three fields (*i.e.*, blade span, CFEI for high speed and 40 percent speed or the nearest speed that is not less than 40 percent speed), if the proposed amendments are adopted.

DOE has tentatively determined that these proposed amendments would not impose additional costs for manufacturers because manufacturers of ceiling fans are already submitting certification reports to DOE and should have readily available the information that DOE is proposing to collect as part of this rulemaking. Any added fields are reflective of the product-specific information needed to verify whether the information provided is consistent with the certifier's statement of compliance with the energy conservation standard requirements applicable to ceiling fans manufactured on and after January 21, 2020, established in January 2017 CF ECS final rule and the Energy Act of 2020. DOE does not believe the revised reporting requirements will cause any measurable change in reporting burden or hours as compared to the current requirements for ceiling fan manufacturers. DOE seeks comment on the certification and reporting costs of the amendments proposed for ceiling fans.

D. Consumer Furnaces and Boilers

1. Scope of Applicability

EPCA defines the term “furnace” to mean a product which utilizes only single-phase electric current, or single-phase electric current or DC current in conjunction with natural gas, propane, or home heating oil, and which: (1) is designed to be the principal heating source for the living space of a residence; (2) is not contained within the same cabinet with a central air conditioner whose rated cooling capacity is above 65,000 Btu per hour; (3) is an electric central furnace, electric boiler, forced-air central furnace, gravity central furnace, or low pressure steam or hot water boiler; and (4) has a heat input rate of less than 300,000 Btu per hour for electric boilers and low pressure steam or hot water boilers and less than 225,000 Btu per hour for forced-air central furnaces, gravity central furnaces, and electric central furnaces. (42 U.S.C. 6291(23)) DOE has codified this definition at 10 CFR 430.2, where it also defines “electric central furnace,” “electric boiler,” “forced-air central furnace,” “gravity central furnace,” and “low pressure steam or hot water boiler”.

The changes proposed in this section apply to non-weatherized oil-fired furnaces, electric furnaces, and consumer boilers meeting the definitions in 10 CFR 430.2.

2. Reporting

Consumer furnace and boiler manufacturers currently must provide the AFUE in percent and the input capacity in British thermal units per hour (“Btu/h”) in their certification report. In addition, for cast-iron sectional boilers, manufacturers must include the type of ignition system for gas-fired steam and hot water boilers and a declaration of whether certification is based on linear interpolation or testing. For hot water boilers, manufacturers must also include a declaration that the manufacturer has incorporated the applicable design requirements. For multi-position furnaces, the AFUE reported for each basic model must be based on testing in the least-efficient configuration, but manufacturers can optionally report and make representations of additional AFUE values based on testing in other configurations. 10 CFR 429.18(b). DOE proposes to modify some of these requirements and add new requirements to better align with the existing standards and aid in determining which energy conservation standards apply to a given basic model for non-weatherized oil-fired consumer furnaces (including mobile home furnaces), electric consumer furnaces, and consumer boilers. The specific changes are discussed in more detail in the following sections.

a. Standby Mode and Off Mode Energy Consumption

DOE’s current standby mode and off mode energy consumption standards for non-weatherized oil-fired furnaces (including mobile home furnaces), electric furnaces, and consumer boilers are in terms of $P_{W,SB}$ and $P_{W,OFF}$ (watts). 10 CFR 430.32(e)(1)(iii) and (e)(2)(iii)(B). However, the reporting requirements for consumer furnaces and boilers at 10 CFR 429.18 do not include a requirement to certify the standby mode and off mode energy consumption of non-weatherized oil-fired furnaces (including mobile home furnaces), electric furnaces, or consumer boilers. Therefore, DOE proposes to require that manufacturers report values for $P_{W,SB}$ and

$P_{W,OFF}$ in their certification reports for non-weatherized oil-fired furnaces (including mobile home furnaces), electric furnaces, and consumer boilers.

Additionally, some manufacturers of consumer furnaces and consumer boilers use identical controls and electrical components across various models and/or product lines with different characteristics (*e.g.*, input capacity) and across AFUE levels. The differences in characteristics may prevent these basic models from being grouped as a single basic model, but because the basic models have identical controls and electrical components affecting standby mode and off mode energy consumption, the standby mode or off mode test result would be expected to be the same for both models. Therefore, DOE proposes that if all electrical components that would impact the standby mode and off mode energy consumption are identical between multiple basic models, manufacturers can optionally test only one of the basic models and use test data from that basic model to rate the standby mode and off mode consumption for other basic models having identical controls and electrical components affecting standby mode and off mode energy consumption.

b. Type of Ignition System for Gas-Fired Consumer Boilers

The energy conservation standards for consumer boilers specify that for gas-fired hot water boilers and gas-fired steam boilers, a constant-burning pilot ignition system is not permitted. 10 CFR 430.32(e)(2)(iii). Currently, manufacturers are required to certify the type of ignition system only for cast iron sectional gas-fired hot water and steam boilers. 10 CFR 429.18(b)(2)(ii). “Cast iron sectional” refers to the construction of the boiler heat exchanger, which is composed of cast iron sections. The energy conservation standards are not limited to only consumer boilers with cast iron sectional heat exchangers, but rather are applicable to all gas-fired hot water boilers and gas-fired steam boilers, including those with heat exchangers made from other materials (*e.g.*, copper, aluminum, stainless steel). Therefore, DOE proposes to modify the reporting requirement for the type of ignition system such that the type of ignition system must be certified for all gas-fired hot water boilers and gas-fired steam boilers. This

change would allow DOE to confirm that the manufacturer-reported type of ignition system for a given basic model meets the design requirement for all types of gas-fired hot water boilers and gas-fired steam boilers. In addition, 10 CFR 429.18(b)(3) requires that for hot water boilers, the manufacturer include in their certification report a declaration that the manufacturer has incorporated the applicable design requirements. As discussed, the standards for gas-fired steam boilers also include a design requirement that use of a constant-burning pilot ignition is not permitted. Therefore, DOE proposes to update the reporting requirements in 10 CFR 429.18(b)(3) to require that manufacturers of gas-fired steam boilers also include a declaration in the certification report that the basic model meets the design requirement criterion.

c. Rounding Requirements

DOE is proposing rounding requirements for the certification reporting requirements proposed in this notice for standby mode and off mode energy consumption. Specifically, DOE proposes to require that values for standby mode and off mode energy consumption be rounded to the nearest 0.1 watts.

In addition, the represented value of AFUE currently must be truncated to one-tenth of a percentage point. 10 CFR 429.18(a)(2)(vii). DOE proposes to modify this requirement to state that AFUE must be rounded to the nearest one-tenth of a percentage point. This change, if adopted, would treat consumer furnaces and boilers in a manner consistent with other types of covered products and equipment, for which represented values are generally required to be rounded rather than truncated. DOE notes that this change could only increase the represented AFUE value, and as such manufacturers would have an option of whether to re-rate the AFUE of existing models that would be impacted by this change.

3. Reporting Costs and Impacts

In this NOPR, DOE proposes to align consumer furnace and boiler certification reporting requirements with the existing energy conservation standard requirements.

For non-weatherized oil-fired consumer furnaces (including mobile home furnaces), electric consumer furnaces, and consumer boilers, the proposed changes, if finalized, would require manufacturers to report two additional values (*i.e.*, $P_{W,SB}$ and $P_{W,OFF}$) in their annual certification reports. For gas-fired hot water and gas-fired steam boiler models that are not cast-iron sectional boilers, the proposed changes, if finalized, would require additional reporting of the type of ignition system.

Manufacturers of consumer furnaces and boilers are currently required to certify various items to DOE, depending on the product class and applicable standards, which can include AFUE, input rate, type of ignition system, and whether applicable design requirements are incorporated. Because manufacturers of these products are already submitting certification reports to DOE and should have readily available the information that DOE is proposing to collect as part of this rulemaking, DOE does not believe the revised reporting requirements would cause any appreciable change in reporting burden or hours as compared to what consumer furnace and boiler manufacturers do currently. Additionally, because the proposed AFUE rounding requirement would only increase represented AFUE values, manufacturers may choose to maintain current AFUE ratings; therefore, DOE does not expect any cost associated with this proposal.

The only product class for which no certification reporting is currently required is electric steam boilers, as there is no AFUE standard or design requirement for this class. However, there are standby mode and off mode standards for electric steam boilers, so the addition of reporting requirements for $P_{W,SB}$ and $P_{W,OFF}$ would require new certification reporting for electric steam boilers, if manufacturers are not already doing so. Costs associated with the proposed updates to reporting requirements are discussed in section IV.C of this document. DOE requests comment on its proposed changes to the reporting requirements for consumer furnaces and boilers, including any cost impacts.

E. Grid-enabled Water Heaters

1. Scope of Applicability

As discussed in section I.B.5 of this document, DOE defines a “grid-enabled water heater” at 10 CFR 430.2, consistent with EPCA’s definition at 42 U.S.C. 6295(e)(6)(A)(ii), to mean an electric resistance water heater that has a rated storage tank volume of more than 75 gallons, is manufactured on or after April 16, 2015, is equipped at the point of manufacture with an activation lock, and bears a permanent label applied by the manufacturer that is made of material not adversely affected by water, is attached by means of a non-water-soluble adhesive, and advises purchasers and end-users of the intended and appropriate use of the product as part of an electric thermal storage or demand response program.

2. Reporting

Currently, for grid-enabled consumer water heater basic models, manufacturers are required to report the uniform energy factor (“UEF”), the rated storage volume in gallons, the first-hour rating in gallons, the recovery efficiency in percent, a declaration that the model is a grid-enabled water heater, whether it is equipped at the point of manufacture with an activation lock, and whether it bears a permanent label applied by the manufacturer that advises purchasers and end-users of the intended and appropriate use of the product. 10 CFR 429.17(b)(2)(iii).

EPCA, as amended, requires manufacturers to report the quantity of grid-enabled water heaters that the manufacturer ships each year and requires DOE to keep the shipment data reported by manufacturers as confidential business information.¹³ (42 U.S.C. 6295(e)(6)(C)(i)-(iii)) As stated in section I.B.5 of this document, the August 2015 final rule, which established definitions and energy conservation standards for grid-enabled water heaters, did not establish provisions to require the reporting of shipments by manufacturers. 80 FR 48004, 48009-48010 (August 11, 2015). Therefore, DOE is proposing to add reporting requirements to 10 CFR 429.17 that would require manufacturers to report the total number of grid-enabled water heaters

¹³ EPCA also requires that utilities and other demand response and thermal storage program operators report annually the quantity of grid-enabled water heaters activated for their programs. (42 U.S.C. 6295(e)(6)(C)(ii))

shipped each year for sale in the U.S., along with the calendar year that the shipments cover, in accordance with the aforementioned requirement of EPCA. DOE also proposes to clarify that the annual shipments of grid-enabled water heaters reported by manufacturers will be treated as confidential business information by the Department. Because the annual shipments of grid-enabled water heaters would be treated differently than other water heater reporting requirements (*i.e.*, the shipments would be reported on an annual basis rather than ongoing based on model availability; and the reported shipments will be treated as confidential business information), DOE is proposing that the annual shipments be reported separately from the other certification reporting requirements for water heaters in 10 CFR 429.17(b).

3. Reporting Costs and Impacts

The addition of reporting requirements for annual shipments of grid-enabled consumer water heaters would newly require manufacturers to report this information. DOE discusses reporting cost impacts corresponding to this proposal in section IV.C of this document. DOE requests comment on its proposal to add new reporting requirements for the number of annual shipments of grid-enabled consumer water heaters, and on its proposal that this information be reported separately from the information that is currently required to be reported under 10 CFR 429.17(b).

F. Dishwashers

1. Scope of Applicability

This NOPR applies to dishwashers, which are cabinet-like appliances which with the aid of water and detergent, wash, rinse, and dries (when a drying process is included) dishware, glassware, eating utensils, and most cooking utensils by chemical, mechanical and/or electrical means and discharge to the plumbing drainage system. 10 CFR 430.2.

2. Reporting

Under the existing requirements in 10 CFR 429.19(b), a certification report must include the following public product-specific information: the estimated annual energy use in kilowatt

hours per year (kWh/yr) and the water consumption in gallons per cycle. 10 CFR 429.19(b)(2).

In addition, a certification report must include the following additional product-specific information: the capacity in number of place settings as specified in ANSI/AHAM DW-1-2010; presence of a soil sensor (if yes, the number of cycles required to reach calibration); the water inlet temperature used for testing in degrees Fahrenheit (°F); the cycle selected for energy testing and whether that cycle is soil-sensing; the options selected for the energy test; and presence of a built-in water softening system (if yes, the energy use in kilowatt-hours and the water use in gallons required for each regeneration of the water softening system, the number of regeneration cycles per year, and data and calculations used to derive these values). 10 CFR 429.19(b)(3).

In conducting testing according to DOE's test procedure, section 2.10 of appendix C1 specifies using Cascade® with the Grease Fighting Power of Dawn® powder as the detergent formulation, at half the quantity specified according to section 4.1 of the industry standard ANSI/Association of Home Appliance Manufacturers ("AHAM") DW-1-2010 ("ANSI/AHAM DW-1-2010"). During AHAM task group meetings in 2020 to establish an updated version of the industry standard, in which DOE participated, AHAM informed DOE that Cascade® with the Grease Fighting Power of Dawn® has been discontinued and has been replaced with Cascade® Complete. AHAM has updated its industry standard to specify the use of Cascade® Complete for testing.¹⁴ Given that the currently specified detergent is no longer available on the market, DOE expects that manufacturers may need to (or have already had to) switch to the new detergent formulation to conduct testing according to appendix C1.

DOE seeks to ensure that any assessment or enforcement testing conducted pursuant to 10 CFR 429.104 and 429.110, respectively, would be performed using the same detergent used by the manufacturer for certifying compliance with the applicable energy conservation standard. Therefore, DOE is proposing to require manufacturers to indicate in the certification report whether Cascade® Complete powder was used as the detergent formulation in lieu of Cascade®

¹⁴ See AHAM DW-1-2020 and AHAM DW-2-2020, available at www.aham.org.

with the Grease Fighting Power of Dawn®. DOE proposes to add this requirement to the list of additional product-specific information specified at 10 CFR 429.19(b)(3).

DOE also proposes to reorganize the requirements specified at 10 CFR 429.19(b)(3) as a numbered list for easier readability.

3. Reporting Costs and Impacts

In this NOPR, DOE proposes to add one additional reported value for dishwashers tested using the new detergent formulation that replaces the currently specified detergent formulation. DOE has tentatively determined that the proposed amendment would not impose additional costs for manufacturers because manufacturers of dishwashers are already submitting certification reports to DOE and should have readily available the information that DOE is proposing to collect as part of this rulemaking (*i.e.*, whether a dishwasher model was tested using Cascade® Complete powder as the detergent formulation in lieu of Cascade® with the Grease Fighting Power of Dawn®). DOE does not believe the revised reporting requirements would cause any measurable change in reporting burden or hours as compared to what dishwasher manufacturers are currently doing today.

DOE requests comment on the proposed reporting requirement for dishwashers, including any corresponding certification and reporting costs.

G. Commercial Clothes Washers

1. Scope of Applicability

This NOPR applies to commercial clothes washers, which means a soft-mounted front-loading or soft-mounted top-loading clothes washer that: (1) has a clothes container compartment that for horizontal-axis clothes washers is not more than 3.5 cubic feet, and for vertical-axis clothes washers is not more than 4.0 cubic feet; and (2) is designed for use in applications in which the occupants of more than one household will be using the clothes washer, such as multi-family housing common areas and coin laundries; or other commercial applications. 10 CFR 431.152; 42 U.S.C. 6311(21).

2. Reporting

Under the existing requirements in 10 CFR 429.46(b), a CCW certification report must include the following public information: the modified energy factor (MEF_{J2}) in cu ft/kWh/cycle and the integrated water factor (IWF) in gal/cu ft/cycle. 10 CFR 429.46(b)(2)(ii). DOE also maintains reporting requirements at 10 CFR 429.46(b)(2)(i) for models tested using Appendix J1, which as of January 1, 2018 is no longer used as the basis for demonstrating compliance with energy conservation standards.

In this NOPR, DOE proposes to remove the reporting requirements currently specified at 10 CFR 429.46(b)(2)(i) for models tested using appendix J1. As discussed, appendix J1 is used as the basis for demonstrating compliance with energy conservation standards for CCWs manufactured prior to January 1, 2018. DOE also proposes to update the term “water factor” in 10 CFR 429.46(a)(2)(i) to “integrated water factor” to match the current metric used as the basis for standards.¹⁵

In addition, DOE proposes to amend the CCW certification reporting requirements by adding to the list of reported values the clothes container capacity (in cubic feet), the type of loading (top-loading or front-loading), and the corrected RMC value (expressed as a percentage), as discussed in the following sections. DOE also proposes rounding instructions for each newly reported value.

a. Clothes Container Capacity

DOE’s definition of “commercial clothes washer” at 10 CFR 431.152, which is consistent with the EPCA definition (see 42 U.S.C. 6311(21)), incorporates clothes container capacity, among other characteristics. Specifically, equipment meeting the definition of CCW has a clothes container compartment that for horizontal-axis clothes washers is not more than 3.5 cubic feet, and for vertical-axis clothes washers is not more than 4.0 cubic feet (among other criteria). 10 CFR 431.152. Clothes container capacity is also a key parameter in the calculation of MEF_{J2}

¹⁵ Prior to January 1, 2018, the water efficiency standard for CCWs was defined using the Water Factor metric.

and IWF, in that capacity is used to represent the per-cycle energy and water use on per-cubic-foot of capacity basis. To verify whether the information provided is consistent with the certifier's statement of compliance with standards, DOE is proposing to amend 10 CFR 429.46(b)(2) to add clothes container capacity (in cubic feet) to the information required to be included in the certification report.

DOE also proposes accompanying sampling provisions for determining the reported values for capacity. Specifically, DOE proposes to add new section 10 CFR 429.46(a)(3), which would specify that the reported capacity of a basic model shall be the mean of the measured clothes container capacity, C, of all tested units of the basic model. This new section would parallel the existing requirement for RCWs in 10 CFR 429.20(a)(3).

b Axis of Loading.

DOE has established equipment classes for CCWs defined by axis of loading (*i.e.*, top-loading and front-loading). Separate energy conservation standards apply to each class. 10 CFR 431.156. As such, the axis of loading is integral in determining the energy conservation standard that applies to each basic model. DOE is proposing to amend 10 CFR 429.46(b)(2) to add the type of loading (top-loading or front-loading) to the information required to be included in the certification report.

c. Remaining Moisture Content

DOE specifies product-specific enforcement provisions for "clothes washers", which includes both RCWs and CCWs. 10 CFR 429.134(c). Specifically, 10 CFR 429.134(c)(1) specifies provisions for the determination of remaining moisture content ("RMC"):¹⁶ The procedure for determining RMC will be performed once in its entirety for each unit tested. The measured RMC value of a tested unit will be considered the tested unit's final RMC value if the measured RMC value is within two RMC percentage points of the certified RMC value of the

¹⁶ The RMC measurement is used to determine the per-cycle energy consumption for removal of moisture from the test load; *i.e.*, the "drying energy" portion of the MEF₁₂ calculation.

basic model (expressed as a percentage) or is lower than the certified RMC value. 10 CFR 429.134(c)(1)(i). If the measured RMC value of a tested unit is more than two RMC percentage points higher than the certified RMC value of the basic model, DOE will perform two additional replications of the RMC measurement procedure, for a total of three independent RMC measurements of the tested unit. The average of the three RMC measurements will be the tested unit's final RMC value and will be used as the basis for the calculation of per-cycle energy consumption for removal of moisture from the test load for that unit. 10 CFR 429.134(c)(1)(ii).

The application of this product-specific enforcement provision for clothes washers requires a certified value of “corrected” RMC¹⁷ for each basic model. Therefore, DOE is proposing to amend 10 CFR 429.46(b)(2) to add the corrected RMC value (expressed as a percentage) to the information required to be included in the certification report.

DOE also proposes accompanying sampling provisions for determining the reported values for corrected RMC. Specifically, DOE proposes to add new section 10 CFR 429.46(a)(4), which would specify that the reported value of corrected RMC of a basic model shall be the mean of the final RMC value measured for all tested units of the basic model. This new section would parallel the existing requirements for RCWs in 10 CFR 429.20(a)(4).

d. Rounding Instructions

DOE proposes to specify at new section 10 CFR 429.46(c) that clothes container capacity must be rounded to the nearest 0.1 cubic feet (“cu ft”), and that corrected RMC must be rounded to the nearest 0.1 percentage point. These rounding instructions would be consistent with the existing rounding instructions for RCWs specified at 10 CFR 429.20(c).

3. Reporting Costs and Impacts

¹⁷ “Corrected” RMC refers to the final RMC value obtained in appendix J2 after applying specified correction factors (based on the lot of test cloth used for testing) to the “uncorrected” RMC value.

In this NOPR, DOE proposes to add three additional reported values for CCWs (*i.e.*, the clothes container capacity, the type of loading, and the corrected RMC value). Currently, manufacturers report two values, as described in the previous section.

DOE has tentatively determined that the proposed amendment would not impose additional costs for manufacturers because manufacturers of CCWs are already submitting certification reports to DOE and should have readily available the information that DOE is proposing to collect as part of this rulemaking. In particular, the clothes container capacity and corrected RMC values are already measured as part of the test procedure and are required for calculating the MEF_{J2} metric. DOE does not believe the revised reporting requirements would cause any measurable change in reporting burden or hours as compared to what CCW manufacturers are currently doing today.

DOE seeks comment on its proposal to change the reporting requirements, specify rounding instructions, and specify sampling provisions for certain reported values for CCWs, including any corresponding certification and reporting costs.

H. Battery Chargers

1. Scope of Applicability

This NOPR applies to battery chargers, which means a device that charges batteries for consumer products, including battery chargers embedded in other consumer products. 10 CFR 430.2.

2. Reporting

Under the existing requirements in 10 CFR 429.39(b), a certification report must include the following public product-specific information for all battery chargers other than uninterruptable power supplies: nameplate battery voltage of the test battery in volts (V), nameplate battery charge capacity of the test battery in ampere-hours (Ah), nameplate battery energy capacity of the test battery in watt-hours (Wh), maintenance mode power (P_m), standby mode power (P_{sb}), off mode power (P_{off}), battery discharge energy (E_{batt}), 24-hour energy

consumption (E_{24}), duration of the charge and maintenance mode test (t_{cd}), and unit energy consumption (UEC). 10 CFR 429.39(b)(2).

In addition, a certification report must include the following additional product-specific information for all battery chargers other than uninterruptible power supplies: the manufacturer and model of the test battery, and the manufacturer and model, when applicable, of the external power supply. 10 CFR 429.39(b)(3).

Certification reports must also include the following product-specific information for all uninterruptible power supplies: supported input dependency mode(s); active power in watts (W); apparent power in volt-amperes (VA); rated input and output voltages in volts (V); efficiencies at 25 percent, 50 percent, 75 percent and 100 percent of the reference test load; and average load adjusted efficiency of the lowest and highest input dependency modes. 10 CFR 429.39(b)(4).

DOE notes that 10 CFR 429.12(a) states that basic models of covered products require annual filings on or before the dates provided in 10 CFR 429.12(d) but paragraph (d) does not specifically list an annual filing date for battery chargers. In light of this omission, DOE proposes to explicitly specify in 10 CFR 429.12(d) that battery chargers be recertified annually on or before September 1.

3. Reporting Costs and Impacts

In this NOPR, DOE proposes no changes to the reported information required for battery chargers. DOE only proposes to specify the annual date by which manufacturers must submit annual certification filings to DOE. DOE has tentatively determined that the proposed amendment would not impose additional costs for manufacturers because manufacturers of battery chargers are already submitting certification reports to DOE. DOE does not believe the revised reporting requirements would cause any measurable change in reporting burden or hours as compared to what battery charger manufacturers are currently doing today.

DOE requests comment on the proposed annual filing date for battery chargers and any corresponding certification and reporting costs.

I. Dedicated-Purpose Pool Pumps

1. Scope of Applicability

This NOPR applies to DPPP, which comprises self-priming pool filter pumps, non-self-priming pool filter pumps, waterfall pumps, pressure cleaner booster pumps, integral sand-filter pool pumps, integral-cartridge filter pool pumps, storable electric spa pumps, and rigid electric spa pumps. 10 CFR 431.462. In the August 2017 Final Rule, DOE adopted certification and reporting requirements for DPPP. 82 FR 36858, 36908.

2. Reporting

Under the existing requirements in 10 CFR 429.59(b)(2)(iv) and (b)(3)(iv), there are requirements for certification reports for DPPP subject to the test methods prescribed in §431.464(b). However, in 10 CFR 429.12, certification is only required for covered equipment subject to an applicable energy conservation standard, and certain DPPP that are subject to the test method, specifically waterfall pumps and polyphase self-priming pool filter pumps, are not subject to an energy conservation standard. Therefore, in this NOPR, DOE proposes to clarify the reporting requirements by removing the language in 10 CFR 429.59(b)(2)(iv) and (b)(3)(iv) that references the test method (as well as a reference to waterfall pumps). In addition, DOE would amend the same provisions to specify that they do not apply to integral cartridge-filter and sand filter pool pumps. Rather, because those pumps are subject to design requirements, they have separate reporting requirements in 10 CFR 429.59(b)(2)(v).

3. Reporting Costs and Impacts

In this NOPR, DOE proposes to clarify the existing certification requirements for DPPP. Therefore, DOE has tentatively determined that the proposed amendment would not impose additional costs or burden for manufacturers.

DOE requests comment on its proposal to clarify the certification requirement for certain models of DPPP.

J. Draft Certification Templates for Review

To help interested parties better understand and review the proposed amendments discussed in the earlier sections of this NOPR, DOE has developed a draft document that includes example tables showing the certification report template inputs as would be required in accordance with the proposals in this NOPR, if finalized.¹⁸ (The draft reporting template requirements will be made available in docket number EERE-2012-BT-STD-0045, available at <https://www.regulations.gov>, upon publication of this NOPR.) The draft tables also include the data entry requirements for each field in the certification report input table.

The draft certification table headers are not reflective of the final certification regulations that may be adopted by a subsequent final rule, nor do they represent the entirety of the information required in a certification report. Upon completion of this rulemaking, DOE will revise the reporting templates to reflect the final certification regulations once DOE has received approval from the Office of Management and Budget (OMB) to collect the revised information. The specific templates that should be used for certifying compliance of covered products and equipment to DOE are available for download at <https://www.regulations.doe.gov/ccms/templates>.

IV. Procedural Issues and Regulatory Review

A. Review Under Executive Orders 12866 and 13563

OMB has determined that this rulemaking does not constitute a “significant regulatory action” under section 3(f) of Executive Order 12866, “Regulatory Planning and Review,” 58 FR 51735 (Oct. 4, 1993). Accordingly, this action was not subject to review under the Executive order by the Office of Information and Regulatory Affairs (“OIRA”) at OMB.

B. Review Under the Regulatory Flexibility Act

¹⁸ The draft document does not include battery chargers or DPPP, as DOE is not proposing any amendments to the reporting requirements for those products, as discussed in sections III.H and III.I of this document.

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires preparation of an initial regulatory flexibility analysis (“IRFA”) for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, “Proper Consideration of Small Entities in Agency Rulemaking,” 67 FR 53461 (August 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the DOE rulemaking process. 68 FR 7990. DOE has made its procedures and policies available on the Office of the General Counsel’s website: (<https://energy.gov/gc/office-general-counsel>).

DOE has tentatively concluded that the removal of outdated reporting requirements and the addition of new reporting requirements as proposed in this NOPR would not impose additional costs for manufacturers of CFLKs, GSILs, and IRLs, ceiling fans, consumer furnaces and boilers (except electric steam boilers), dishwashers, CCWs, battery chargers, and DPPP for the reasons discussed in section III of this document. For these products and equipment, DOE has tentatively determined that the proposed amendments would not impose additional costs for manufacturers because manufacturers are already submitting certification reports to DOE and should have readily available the information that DOE is proposing to collect as part of this rulemaking, and for DPPP, the proposed amendments clarify the existing reporting requirements. Consequently, for these types of covered products and equipment, the changes proposed in this NOPR would not be expected to have a significant economic impact on related entities regardless of size.

However, for electric steam boilers, no certification is currently required. This proposal would amend 10 CFR 429.18 to include a requirement to certify the standby mode and off mode energy consumption for electric steam boilers. This amendment aligns the certification requirements with the existing energy conservation standard requirements. 10 CFR 430.32(e)(1)(iii) and (e)(2)(iii)(B). For electric steam boiler manufacturers that are not already

certifying, there could be additional paperwork costs. Likewise, for grid-enabled water heaters, this proposal would add reporting requirements to align with the requirements of EPCA. EPCA, as amended, requires manufacturers to report the quantity of grid-enabled water heaters that the manufacturer ships each year and requires DOE to keep the shipment data reported by manufacturers as confidential business information. (42 U.S.C. 6295(e)(6)(C)(i)-(iii)) Therefore, grid-enabled water heater manufacturers would incur additional paperwork costs.

The Small Business Administration (“SBA”) considers a business entity to be a small business, if, together with its affiliates, it employs less than a threshold number of workers specified in 13 CFR part 121. The size standards and codes are established by the 2017 North American Industry Classification System (“NAICS”).

Electric steam boiler manufacturers are classified under NAICS code 333414, “Heating Equipment (except Warm Air Furnaces) Manufacturing.” The SBA sets a threshold of 500 employees or fewer for an entity to be considered as a small business in this category. DOE used available public information to identify potential small manufacturers. DOE accessed the Compliance Certification Database¹⁹ and reviewed manufacturer literature to create a list of companies that import or otherwise manufacture the electric steam boilers covered by this proposal. Using these sources, DOE identified four manufacturers of electric steam boilers. All four manufacturers are small businesses. DOE estimates that the increased certification burden would result in 35 hours per manufacturer to develop the required certification reports. Therefore, based on a fully burdened labor rate of \$100 per hour, the estimated total annual cost to manufacturers would be \$3,500 per manufacturer.²⁰ Using available public information, DOE estimated the annual revenue for all four small businesses that manufacture electric steam boilers. The small business with the least annual revenue has an annual revenue of

¹⁹ U.S. Department of Energy Compliance Certification Management System (Available at: <https://www.regulations.doe.gov/ccms>).

²⁰ The estimates of 35 hours per response and \$100 per hour fully burdened labor rate are based on the collection of information estimates for consumer products and commercial/industrial equipment subject to energy or water conservation standards. See 82 FR 57240 (Dec. 4, 2017).

approximately \$5.4 million. Therefore, this additional certification cost of \$3,500 per manufacturer represents significantly less than 1 percent of each identified manufacturer's annual revenue.

Grid-enabled water heater manufacturers are classified under NAICS code 335220, "Major Household Appliance Manufacturing." The SBA sets a threshold of 1,500 employees or fewer for an entity to be considered as a small business in this category. DOE used available public information to identify potential small manufacturers. DOE accessed the Compliance Certification Database²¹ and the certified product directory of the Air Conditioning, Heating and Refrigeration Institute²² ("AHRI"), and the Department also reviewed manufacturer literature. These actions allowed DOE to create a list of companies that import or otherwise manufacture the grid-enabled water heaters. Using these sources, DOE identified five manufacturers of grid-enabled water heaters. The five manufacturers exceed the SBA threshold to be considered a small business. Thus, DOE did not identify any small business manufacturers of grid-enabled water heaters.

DOE reviewed this proposed rule under the provisions of the Regulatory Flexibility Act and the policies and procedures published on February 19, 2003. On the basis of the foregoing, DOE initially concludes that the impacts of the amendments to DOE's certification regulations proposed in this NOPR would not have a "significant economic impact on a substantial number of small entities." Accordingly, DOE has not prepared an IRFA for this NOPR. DOE will transmit this certification of no significant impact on a substantial number of small entities and supporting statement of factual basis to the Chief Counsel for Advocacy of the Small Business Administration for review under 5 U.S.C. 605(b).

C. Review Under the Paperwork Reduction Act of 1995

²¹ U.S. Department of Energy Compliance Certification Management System (Available at: <https://www.regulations.doe.gov/ccms>).

²² AHRI Directory of Certified Product Performance (Available at: <https://www.ahridirectory.org/Search/SearchHome>).

Manufacturers of CFLKs, GSILs, IRLs, ceiling fans, consumer furnaces and boilers (except for electric steam boilers), consumer water heaters, dishwashers, CCWs, battery chargers, and DPPP's must certify to DOE that their products or equipment comply with any applicable energy conservation standards. To certify compliance, manufacturers must first obtain test data for their products or equipment according to the DOE test procedures, including any amendments adopted for those test procedures. DOE's current reporting requirements are approved under OMB Control Number 1910-1400.

1. Description of the Requirements

DOE is proposing to amend the reporting requirements for CFLKs, GSILs, IRLs, ceiling fans, consumer furnaces and boilers, consumer water heaters, dishwashers, CCWs, battery chargers, and DPPP's. DOE will send a revised information collection approval to OMB under the existing Control Number 1910-1400. The revisions will just reflect the changes proposed in this rulemaking as an amendment to the existing information collection.

2. Method of Collection

DOE is proposing that respondents must submit electronic forms using DOE's online Compliance Certification Management System ("CCMS"). DOE's CCMS is publicly accessible at <https://www.regulations.doe.gov/ccms/>, and includes instructions for users, registration forms, and the product-specific reporting templates required for use when submitting information to CCMS.

3. Data

The following are DOE estimates of the total annual reporting and recordkeeping burden imposed on manufacturers of CFLKs, GSILs, IRLs, ceiling fans, consumer furnaces and boilers, consumer water heaters, dishwashers, CCWs, battery chargers, and DPPP's subject to the amended certification reporting requirements proposed in this proposed rule. These estimates take into account the time necessary to develop any additional testing documentation, maintain

any additional documentation supporting the development of the certified rating for each basic model, complete any additional certification, and submit any additional required documents to DOE electronically.

DOE has tentatively determined that these proposed amendments would not impose additional costs for manufacturers of CFLKs, GSILs, IRLs, ceiling fans, dishwashers, CCWs, battery chargers, most consumer furnaces and boilers, and most consumer water heaters, because manufacturers of these products or equipment are already submitting certification reports to DOE and should have readily available the information that DOE is proposing to collect as part of this rulemaking. DOE has also tentatively determined that these proposed amendments would not impose additional costs for manufacturers of DPPP's because the proposals only clarify the existing certification requirements.

DOE's proposed amendments for the reporting requirements for electric steam boilers would require new certification reporting for electric steam boilers manufacturers and importers. DOE estimates there are four manufacturers of electric steam boilers that would have to submit annual certification reports to DOE for those products based on the proposed reporting requirements. The following section estimates the burden for these four electric steam boiler manufacturers.

OMB Control Number: 1910-1400.

Form Number: DOE F 220.7.

Type of Review: Regular submission.

Affected Public: Domestic manufacturers and importers of electric steam boilers covered by this rulemaking.

Estimated Number of Respondents: 4.

Estimated Time per Response: Certification reports, 35 hours.

Estimated Total Annual Burden Hours: 140.

Estimated Total Annual Cost to the Manufacturers: \$14,000 in recordkeeping/reporting costs.

For grid-enabled consumer water heaters, DOE is proposing to add reporting requirements to 10 CFR 429.17 that would require manufacturers and importers to report the total number of grid-enabled water heaters shipped each year in accordance with the requirement in EPCA. The following are DOE estimates of the total annual reporting and recordkeeping burden imposed on manufacturers of grid-enabled consumer water heaters subject to the proposed reporting provisions in this NOPR. These estimates take into account the time necessary to develop testing documentation, maintain all the documentation supporting the development of the certified rating for each basic model, complete the certification, and submit all required documents to DOE electronically.

OMB Control Number: 1910-1400.

Form Number: DOE F 220.92.

Type of Review: Regular submission.

Affected Public: Manufacturers and importers of grid-enabled consumer water heaters covered by this rulemaking.

Estimated Number of Respondents: 5.

Estimated Time per Response: Certification reports, 35 hours.

Estimated Total Annual Burden Hours: 175.

Estimated Total Annual Cost to the Manufacturers: \$17,500 in recordkeeping/reporting costs.

4. Conclusion

DOE has tentatively concluded that the removal of outdated reporting requirements and the addition of reporting requirements as proposed in this NOPR would not impose additional costs for CFLK, GSIL, IRL, CF, dishwasher, CCW, battery charger, DPPP, most consumer water heater, and most consumer furnace and boiler manufacturers (see sections III.A.3, III.B.3,

III.C.3, III.D.3, III.E, III.F.3, III.G.3, and III.H.3 of this document for a more complete discussion). Furthermore, DOE has tentatively concluded that there are four electric steam boiler manufacturers and five consumer water heater manufacturers that would have to submit new annual certification reports to DOE for those products. For all other manufacturers of covered products or equipment described in this NOPR, the public reporting burden for certification remains unchanged.

Public comment is sought regarding: (1) whether this proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (2) the accuracy of the burden estimate; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information, including through the use of automated collection techniques or other forms of information technology. Send comments on these or any other aspects of the collection of information to the email address listed in the **ADDRESSES** section and to the OMB Desk Officer by email to *Sofie.E.Miller@omb.eop.gov*.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act of 1995 (PRA), unless that collection of information displays a currently valid OMB Control Number.

D. Review Under the National Environmental Policy Act of 1969

DOE is analyzing this proposed regulation in accordance with the National Environmental Policy Act of 1969 (“NEPA”) and DOE’s NEPA implementing regulations (10 CFR part 1021). DOE’s regulations include a categorical exclusion for rulemakings interpreting or amending an existing rule or regulation that does not change the environmental effect of the rule or regulation being amended. 10 CFR part 1021, subpart D, appendix A5. DOE anticipates that this rulemaking qualifies for categorical exclusion A5 because it is a rulemaking that does

not change the environmental effect of the current rule and otherwise meets the requirements for application of a categorical exclusion. *See* 10 CFR 1021.410. DOE will complete its NEPA review before issuing the final rule.

E. Review Under Executive Order 13132

Executive Order 13132, “Federalism,” 64 FR 43255 (August 10, 1999), imposes certain requirements on agencies formulating and implementing policies or regulations that preempt State law or that have federalism implications. The Executive order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and to carefully assess the necessity for such actions. The Executive order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. 65 FR 13735. DOE has examined this proposed rule and has tentatively determined that it would not have a substantial direct effect on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. EPCA governs and prescribes Federal preemption of State regulations as to energy conservation for the products and equipment that are the subject of this proposed rule. States can petition DOE for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. (42 U.S.C. 6297; 42 U.S.C. 6316(a) and (b)(2)(D)) Therefore, no further action is required by Executive Order 13132.

F. Review Under Executive Order 12988

Regarding the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, “Civil Justice Reform,” 61 FR 4729 (Feb. 7, 1996),

imposes on Federal agencies the general duty to adhere to the following requirements: (1) eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; (3) provide a clear legal standard for affected conduct rather than a general standard, and (4) promote simplification and burden reduction. Regarding the review required by section 3(a), section 3(b) of Executive Order 12988 specifically requires that executive agencies make every reasonable effort to ensure that the regulation: (1) clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms, and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires executive agencies to review regulations in light of applicable standards in sections 3(a) and 3(b) to determine whether they are met, or whether it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, this proposed rule meets the relevant standards of Executive Order 12988.

G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (“UMRA”) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and Tribal governments and the private sector. Pub. L. 104-4, sec. 201 (codified at 2 U.S.C. 1531). For a proposed regulatory action likely to result in a rule that may cause the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of \$100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a), (b)) The UMRA also requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local, and Tribal

governments on a proposed “significant intergovernmental mandate,” and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect them. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820 (also available at <https://energy.gov/gc/office-general-counsel>). DOE examined this proposed rule according to UMRA and its statement of policy and determined that the proposed rule contains neither a Federal intergovernmental mandate, nor a mandate that may result in the expenditure of \$100 million or more in any year by State, local, and Tribal governments, in the aggregate, or by the private sector. As a result, the analytical requirements of UMRA do not apply.

H. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105-277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. This proposed rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

I. Review Under Executive Order 12630

Pursuant to Executive Order 12630, “Governmental Actions and Interference with Constitutionally Protected Property Rights,” 53 FR 8859 (March 18, 1988), DOE has determined that this proposed rule would not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

J. Review Under Treasury and General Government Appropriations Act, 2001

Section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note) provides for agencies to review most disseminations of information to the public under information quality guidelines established by each agency pursuant to general guidelines issued by OMB. OMB's guidelines were published at 67 FR 8452 (Feb. 22, 2002), and DOE's guidelines were published at 67 FR 62446 (Oct. 7, 2002). Pursuant to OMB Memorandum M-19-15, Improving Implementation of the Information Quality Act (April 24, 2019), DOE published updated guidelines which are available at: <https://www.energy.gov/sites/prod/files/2019/12/f70/DOE%20Final%20Updated%20IQA%20Guidelines%20Dec%202019.pdf>. DOE has reviewed this proposed rule under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

K. Review Under Executive Order 13211

Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use," 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare and submit to OIRA at OMB, a Statement of Energy Effects for any proposed significant energy action. A "significant energy action" is defined as any action by an agency that promulgates or is expected to lead to promulgation of a final rule, and that: (1) is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (3) is designated by the Administrator of OIRA as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

This proposed regulatory action to amend the certification provisions for CFLKs, GSILs, IRLs, ceiling fans, consumer furnaces and boilers, consumer water heaters, dishwashers, CCWs, battery chargers, and DPPP is not a significant regulatory action under Executive Order 12866.

Moreover, it would not have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as a significant energy action by the Administrator of OIRA. Therefore, it is not a significant energy action, and, accordingly, DOE has not prepared a Statement of Energy Effects.

L. Review Under Section 32 of the Federal Energy Administration Act of 1974

Under section 301 of the Department of Energy Organization Act (Pub. L. 95–91; 42 U.S.C. 7101), DOE must comply with section 32 of the Federal Energy Administration Act of 1974, as amended by the Federal Energy Administration Authorization Act of 1977. (15 U.S.C. 788; “FEAA”) Section 32 essentially provides in relevant part that, where a proposed rule authorizes or requires use of commercial standards, the notice of proposed rulemaking must inform the public of the use and background of such standards. In addition, section 32(c) requires DOE to consult with the Attorney General and the Chairman of the Federal Trade Commission (“FTC”) concerning the impact of the commercial or industry standards on competition.

The proposed modifications to the certification reporting requirements for CFLKs, GSILs, IRLs, ceiling fans, consumer furnaces and boilers, consumer water heaters, dishwashers, CCWs, battery chargers, and DPPP do not incorporate testing methods contained in any commercial standards.

M. Materials Incorporated by Reference

The Director of the Federal Register previously approved the following standards from the Association of Home Appliance Manufacturers (“AHAM”) and the American National Standards Institute (ANSI) for incorporation by reference into §§ 429.19 and 429.59: ANSI/AHAM DW-1-2010, “Household Electric Dishwashers”, and NSF International (NSF)/ANSI 50-2015, “Equipment For Swimming Pools, Spas, Hot Tubs and Other Recreational

Water Facilities,” Annex C—“Test methods for the evaluation of centrifugal pumps,” Section C.3, “self-priming capability.”

V. Public Participation

A. Submission of Comments

DOE will accept comments, data, and information regarding this proposed rule no later than the date provided in the **DATES** section at the beginning of this proposed rule. Interested parties may submit comments, data, and other information using any of the methods described in the **ADDRESSES** section at the beginning of this document.

Submitting comments via <https://www.regulations.gov>. The <https://www.regulations.gov> webpage will require you to provide your name and contact information. Your contact information will be viewable to DOE Building Technologies staff only. Your contact information will not be publicly viewable except for your first and last names, organization name (if any), and submitter representative name (if any). If your comment is not processed properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

However, your contact information will be publicly viewable if you include it in the comment itself or in any documents attached to your comment. Any information that you do not want to be publicly viewable should not be included in your comment, nor in any document attached to your comment. If these directions are followed, persons viewing comments will see only first and last names, organization names, correspondence containing comments, and any documents submitted with the comments.

Do not submit to <https://www.regulations.gov> information for which disclosure is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information (“CBI”)). Comments submitted through

<https://www.regulations.gov> cannot be claimed as CBI. Comments received through the website will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section.

DOE processes submissions made through <https://www.regulations.gov> before posting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of comments are being processed simultaneously, your comment may not be viewable for up to several weeks. Please keep the comment tracking number that <https://www.regulations.gov> provides after you have successfully uploaded your comment.

Submitting comments via email. Comments and documents submitted via email also will be posted to <https://www.regulations.gov>. If you do not want your personal contact information to be publicly viewable, do not include it in your comment or any accompanying documents. Instead, provide your contact information in a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. With this instruction followed, the cover letter will not be publicly viewable as long as it does not include any comments.

Include contact information each time you submit comments, data, documents, and other information to DOE. No telefacsimiles (faxes) will be accepted.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format. Provide documents that are not secured, written in English, and free of any defects or viruses. Documents should not contain special characters or any form of encryption, and, if possible, they should carry the electronic signature of the author.

Campaign form letters. Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

Confidential Business Information. Pursuant to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email two well-marked copies: one copy of the document marked “confidential” including all the information believed to be confidential, and one copy of the document marked “non-confidential” with the information believed to be confidential deleted. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

It is DOE’s policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

B. Issues on Which DOE Seeks Comment

Although DOE welcomes comments on any aspect of this proposal, DOE is particularly interested in receiving comments and views of interested parties concerning the following issues:

- (1) DOE seeks comment on whether CFLKs are still being distributed in commerce and manufactured prior to January 21, 2020, and, therefore, DOE should retain compliance requirements for these standards.
- (2) DOE seeks comments on requiring the reporting of lumen output and efficacy to certify compliance to January 21, 2020 standards.
- (3) DOE seeks comment on reporting lumen maintenance at 1,000 hours and at 40 percent of lifetime, lifetime, and the rapid cycle stress test results for medium screw base CFLs in CFLKs. DOE seeks comment on allowing estimates for lumen maintenance at 40 percent of lifetime, lifetime, and the rapid cycle stress test result.
- (4) DOE seeks comment on requiring a declaration that pin-based fluorescent lamps in CFLKs have an electronic ballast. DOE also seeks comment on requiring a declaration that CFLKs are packaged with lamps sufficient to fill all sockets.

- (5) DOE seeks comment on the other proposed amendments to the CFLK reporting requirements.
- (6) DOE requests comment on the certification reporting costs of the amendments proposed for CFLKs.
- (7) DOE seeks comments on requiring the reporting of CRI to certify compliance with existing energy conservation standard requirements for IRLs. DOE also seeks comment on requiring the reporting of lamp diameter and rated voltage to help determine the applicable energy conservation standard for IRLs.
- (8) DOE seeks comment on requiring the reporting of initial lumen output to help determine the applicable energy conservation standard for GSILs.
- (9) DOE requests comment on the certification and reporting costs of the amendments proposed for IRLs and GSILs and whether it will result in an increase in reporting burden.
- (10) DOE seeks comment on the proposed updated reporting requirements for small-diameter ceiling fans and LDCFs.
- (11) DOE seeks comment on the certification and reporting costs of the amendments proposed for ceiling fans.
- (12) DOE seeks comment on its proposed changes to the reporting requirements for consumer furnaces and boilers, including any cost impacts.
- (13) DOE seeks comment on its proposal to add new reporting requirements for the number of shipments of grid-enabled consumer water heaters, and on its proposal that this information be reported separately from the information that is currently required to be reported under 10 CFR 429.17(b).
- (14) DOE requests comment on the proposed reporting requirement for dishwashers, including any corresponding certification and reporting costs.

- (15) DOE seeks comment on its proposal to change the reporting requirements, specify rounding instructions, and specify sampling provisions for certain reported values for CCWs, including any corresponding certification and reporting costs.
- (16) DOE requests comment on the proposed annual filing date for battery chargers and any corresponding certification and reporting costs.
- (17) DOE requests comment on its proposal to clarify the certification requirement for certain models of DPPP.

VI. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this proposed rule.

List of Subjects in 10 CFR Part 429

Administrative practice and procedure, Confidential business information, Energy conservation, Household appliances, Imports, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements, Small businesses.

Signing Authority

This document of the Department of Energy was signed on July 17, 2021, by Kelly Speakes-Backman, Principal Deputy Assistant Secretary and Acting Assistant Secretary for Energy Efficiency and Renewable Energy, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, DC, on July 19, 2021.

Treena V. Garrett,
Federal Register Liaison Officer,
U.S. Department of Energy.

For the reasons stated in the preamble, DOE proposes to amend part 429 of title 10 of the Code of Federal Regulations as set forth below:

**PART 429--CERTIFICATION, COMPLIANCE, AND ENFORCEMENT FOR
CONSUMER PRODUCTS AND COMMERCIAL AND INDUSTRIAL EQUIPMENT**

1. The authority citation for part 429 continues to read as follows:

Authority: 42 U.S.C. 6291–6317; 28 U.S.C. 2461 note.

2. Section 429.12 is amended by revising paragraph (d) to read as follows:

§429.12 General requirements applicable to certification reports.

* * * * *

(d) *Annual filing.* All data required by paragraphs (a) through (c) of this section shall be submitted to DOE annually, on or before the following dates:

Table 1 to Paragraph (d)

Product category	Deadline for data submission
(1) Portable air conditioners	February 1.
(2) Fluorescent lamp ballasts; Compact fluorescent lamps; General service fluorescent lamps, general service incandescent lamps, and incandescent reflector lamps; Candelabra base incandescent lamps and intermediate base incandescent lamps; Ceiling fans; Ceiling fan light kits; Showerheads; Faucets; Water closets; and Urinals	March 1.
(3) Water heaters; Consumer furnaces; Pool heaters; Commercial water heating equipment; Commercial packaged boilers; Commercial warm air furnaces; Commercial unit heaters; and Furnace fans	May 1.
(4) Dishwashers; Commercial pre-rinse spray valves; Illuminated exit signs; Traffic signal modules and pedestrian modules; and Distribution transformers	June 1.
(5) Room air conditioners; Central air conditioners and central air conditioning heat pumps; and Commercial heating, ventilating, air conditioning (HVAC) equipment	July 1.
(6) Consumer refrigerators, refrigerator-freezers, and freezers; Commercial refrigerators, freezers, and refrigerator-freezers; Automatic commercial ice makers; Refrigerated bottled or canned beverage vending machines; Walk-in coolers and walk-in freezers; and Consumer miscellaneous refrigeration products	August 1.

(7) Torchieres; Dehumidifiers; Metal halide lamp ballasts and fixtures; External power supplies; Pumps; and Battery chargers	September 1.
(8) Residential clothes washers; Residential clothes dryers; Direct heating equipment; Cooking products; and Commercial clothes washers	October 1.

* * * * *

3. Section 429.17 is amended by adding paragraph (c) to read as follows:

§429.17 Water heaters.

* * * * *

(c) *Reporting of annual shipments for grid-enabled water heaters.* Pursuant to 42 U.S.C. 6295(e)(6)(C)(i), manufacturers of grid-enabled water heaters must report the total number of grid-enabled water heater units shipped for sale in the U.S. by the manufacturer for the previous calendar year (*i.e.*, January 1st through December 31st), as well as the calendar year that the shipments cover, starting on or before May 1, 2022 and annually on or before May 1 each year thereafter. This information shall be reported separately from the certification report required under paragraph (b)(2) of this section and must be submitted to DOE in accordance with the submission procedures set forth in §429.12(h). DOE will consider the annual reported shipments to be confidential business information without the need for the manufacturer to request confidential treatment of the information pursuant to §429.7(c).

4. Section 429.18 is amended by revising the section heading and paragraphs (a)(2)(vii) and (b)(2) and (3) to read as follows:

§429.18 Consumer furnaces.

(a)* * *

(2)* * *

(vii) The represented value of annual fuel utilization efficiency must be rounded to the nearest one-tenth of a percentage point. The represented values of standby mode power and off mode power must be rounded to the nearest one-tenth of a watt.

(b)* * *

(2) Pursuant to §429.12(b)(13), a certification report shall include the following public product-specific information:

(i) Consumer furnaces and boilers: The annual fuel utilization efficiency (AFUE) in percent (%) and the input capacity in British thermal units per hour (Btu/h).

(ii) For gas-fired hot water and gas-fired steam boilers: The type of ignition system.

(iii) For non-weatherized oil-fired furnaces (including mobile home furnaces), electric furnaces, and boilers: The standby mode power consumption ($P_{W,SB}$) and off mode power consumption ($P_{W,OFF}$) in watts.

(3) Pursuant to §429.12(b)(13), a certification report shall include the following additional product-specific information:

(i) For cast-iron sectional boilers: A declaration of whether certification is based on linear interpolation or testing.

(ii) For hot water boilers and gas-fired steam boilers: A declaration that the manufacturer has incorporated the applicable design requirements.

* * * * *

5. Section 429.19 is amended by revising paragraph (b)(3) to read as follows:

§429.19 Dishwashers.

* * * * *

(b) * * *

(3) Pursuant to §429.12(b)(13), a certification report shall include the following additional product-specific information—

(i) The capacity in number of place settings as specified in ANSI/AHAM DW-1-2010 (incorporated by reference, see §429.4);

(ii) Presence of a soil sensor (if yes, the number of cycles required to reach calibration);

(iii) The water inlet temperature used for testing in degrees Fahrenheit (°F);

(iv) The cycle selected for energy testing and whether that cycle is soil-sensing;

(v) The options selected for the energy test;

(vi) Presence of a built-in water softening system (if yes, the energy use in kilowatt-hours and the water use in gallons required for each regeneration of the water softening system, the number of regeneration cycles per year, and data and calculations used to derive these values); and

(vii) Indication of whether Cascade® Complete powder was used as the detergent formulation in lieu of Cascade® with the Grease Fighting Power of Dawn® powder.

6. Section 429.27 is amended by revising paragraphs (b)(2)(ii) and (iii) to read as follows:

§429.27 General service fluorescent lamps, general service incandescent lamps, and incandescent reflector lamps.

* * * * *

(b) * * *

(2) * * *

(ii) Incandescent reflector lamps: The testing laboratory's International Laboratory Accreditation Cooperation (ILAC) accreditation body's identification number or other approved identification assigned by the ILAC accreditation body, production dates of the units tested, the 12-month average lamp efficacy in lumens per watt (lm/W), lamp wattage (W), rated voltage (V), diameter in inches, and CRI.

(iii) General service incandescent lamps: The testing laboratory's ILAC accreditation body's identification number or other approved identification assigned by the ILAC accreditation body, production dates of the units tested, the 12-month average maximum rate wattage in watts (W), the 12-month average minimum rated lifetime (hours), and the 12-month average CRI, and initial lumen output in lumens (lm).

* * * * *

7. Section 429.32 is amended by:

- a. Revising paragraph (b); and
- b. Adding paragraph (c).

The revision and addition read as follows:

§429.32 Ceiling fans.

* * * * *

(b) *Certification reports.* (1) The requirements of §429.12 are applicable to ceiling fans; and

(2) Pursuant to §429.12(b)(13), a certification report shall include the following public product-specific information:

(i) For all ceiling fans: Blade span (in), the number of speeds within the ceiling fan controls, and a declaration that the manufacturer has incorporated the applicable design requirements.

(ii) For small-diameter ceiling fans: a declaration whether the ceiling fan is a multi-head ceiling fan, and the ceiling fan efficiency (cubic feet per minute per watt (CFM/W)).

(iii) For large-diameter ceiling fans: ceiling fan energy index (CFEI) for high speed and 40 percent speed or the nearest speed that is not less than 40 percent speed.

(3) Pursuant to §429.12(b)(13), a certification report shall include the following additional product-specific information:

(i) For small-diameter ceiling fans: standby power, blade edge thickness (in), airflow (CFM) at high speed, and blade revolutions per minute (RPM) at high speed.

(ii) For low-speed small-diameter ceiling fans: the distance (in) between the ceiling and the lowest point on the fan blades (in both hugger and standard configurations for multi-mount fans).

(c) *Rounding requirements.* Any represented value of ceiling fan efficiency, as described in paragraph (a)(2)(i) of this section must be expressed in cubic feet per minute per watt (CFM/W) and rounded to the nearest whole number. Any represented value of ceiling fan

energy index, as described in paragraph (a)(2)(i) of this section must be expressed in CFEI and rounded to the nearest hundredth of a CFEI.

8. Section 429.33 is amended by revising paragraphs (b) and (c) to read as follows:

§429.33 Ceiling fan light kits.

* * * * *

(b) *Certification reports.* (1) The requirements of §429.12 are applicable to ceiling fan light kits (CFLKs); and

(2) Pursuant to §429.12(b)(13), a certification report shall include the following product-specific information:

(i) A declaration that the CFLK is packaged with lamps sufficient to fill all of the lamp sockets;

(ii) For each basic model of lamp and/or each basic model of integrated solid state lighting (SSL) circuitry packaged with the ceiling fan light kit, the brand, basic model number, test sample size, kind of lamp (*i.e.*, general service fluorescent lamp [GSFL]; fluorescent lamp with a pin base that is not a GSFL; compact fluorescent lamp [CFL] with a medium screw base; CFL with a base that is not medium screw base [*e.g.*, candelabra base]; other fluorescent lamp [not GSFL or CFL]; general service incandescent lamp [GSIL]; candelabra base incandescent lamp; intermediate base incandescent lamp; incandescent reflector lamp; other incandescent lamp [not GSIL, IRL, candelabra base or intermediate base incandescent lamp], integrated LED lamp; integrated SSL circuitry; other SSL products [not integrated LED lamp]; other lamp not mentioned), lumen output in lumens, efficacy in lumens per watt (lm/W), and a declaration that, where applicable, the lamp basic model was tested by a laboratory accredited as required under §430.25;

(iii) For each lamp basic model identified in paragraph (b)(2)(ii) of this section that is a compact fluorescent lamp with a medium screw base, the lumen maintenance at 40 percent of lifetime in percent (%) (and whether value is estimated), the lumen maintenance at 1,000 hours

in percent (%), the lifetime in hours (h) (and whether value is estimated), and the sample size for rapid cycle stress testing and results in number of units passed (and whether the value is estimated). Estimates of lifetime, lumen maintenance at 40 percent of lifetime, and rapid cycle stress test surviving units may be reported until testing is complete. Manufacturers are required to maintain records in accordance with §429.71 of the development of all estimated values and any associated initial test data; and

(iv) For ceiling fan light kits with pin-based sockets for fluorescent lamps, a declaration that each ballast for such lamps is an electronic ballast.

(c) *Rounding requirements.* (1) Any represented value of efficacy of CFLKs as described in paragraph (a) of this section must be expressed in lumens per watt and rounded to the nearest tenth of a lumen per watt.

(2) Round lumen output to three significant digits.

(3) Round lumen maintenance at 1,000 hours to the nearest tenth of a percent.

(4) Round lumen maintenance at 40 percent of lifetime to the nearest tenth of a percent.

(5) Round lifetime to the nearest whole hour.

9. Section 429.46 is amended by:

a. Revising paragraph (a)(2)(i) introductory text;

b. Adding paragraphs (a)(3) and (4);

c. Revising paragraph (b)(2); and

d. Adding paragraph (c).

The revisions and additions read as follows:

§429.46 Commercial clothes washers.

(a) * * *

(2) * * *

(i) Any represented value of the integrated water factor or other measure of energy or water consumption of a basic model for which consumers would favor lower values shall be greater than or equal to the higher of:

* * * * *

(3) The clothes container capacity of a basic model reported in accordance with paragraph (b)(2) of this section shall be the mean of the measured clothes container capacity, C, of all tested units of the basic model.

(4) The corrected remaining moisture content (RMC) of a basic model reported in accordance with paragraph (b)(2) of this section shall be the mean of the final RMC value measured for all tested units of the basic model.

(b) * * *

(2) Pursuant to §429.12(b)(13), a certification report shall include the following public product-specific information:

(i) The modified energy factor (MEF_{J2}), in cubic feet per kilowatt-hour per cycle (cu ft/kWh/cycle);

(ii) The integrated water factor (IWF), in gallons per cycle per cubic feet (gal/cycle/cu ft);

(iii) The clothes container capacity, in cubic feet (cu ft);

(iv) The type of loading (top-loading or front-loading); and

(v) The corrected RMC (expressed as a percentage).

(c) *Reported values.* Values reported pursuant to this section must be rounded as follows: Clothes container capacity to the nearest 0.1 cu ft, and corrected RMC to the nearest 0.1 percentage point.

10. Section 429.59 is amended by revising paragraphs (b)(2)(iv) and (b)(3)(iv) to read as follows:

§429.59 Pumps.

* * * * *

(b) * * *

(2) * * *

(iv) For a dedicated-purpose pool pump (other than an integral cartridge-filter or sand-filter pool pump): weighted energy factor (WEF) in kilogallons per kilowatt-hour (kgal/kWh); rated hydraulic horsepower in horsepower (hp); the speed configuration for which the pump is being rated (*i.e.*, single-speed, two-speed, multi-speed, or variable-speed); true power factor at all applicable test procedure load points *i* (dimensionless), as specified in Table 1 of appendix B or C to subpart Y of part 431 of this chapter, as applicable; dedicated-purpose pool pump nominal motor horsepower in horsepower (hp); dedicated-purpose pool pump motor total horsepower in horsepower (hp); dedicated-purpose pool pump service factor (dimensionless); for self-priming pool filter pumps and non-self-priming pool filter pumps: The maximum head (in feet) which is based on the mean of the units in the tested sample; a statement regarding whether freeze protection is shipped enabled or disabled; for dedicated-purpose pool pumps distributed in commerce with freeze protection controls enabled: The default dry-bulb air temperature setting (in °F), default run time setting (in minutes), and default motor speed (in rpm); for self-priming pool filter pumps a statement regarding whether the pump is certified with NSF/ANSI 50-2015 (incorporated by reference, see §429.4) as self-priming; and, for self-priming pool filter pumps that are not certified with NSF/ANSI 50-2015 as self-priming: The vertical lift (in feet) and true priming time (in minutes) for the dedicated-purpose pool pump (DPPP) model.

* * * * *

(3) * * *

(iv) For a dedicated-purpose pool pump (other than an integral cartridge-filter or sand-filter pool pump): Calculated driver power input and flow rate at each load point *i* (P_i and Q_i), in horsepower (hp) and gallons per minute (gpm), respectively.

* * * * *

11. Section 429.70 is amended by adding paragraph (i) to read as follows:

§429.70 Alternative methods for determining energy efficiency and energy use.

* * * * *

(i) *Alternative determination of standby mode and off mode power consumption for untested basic models of consumer furnaces and consumer boilers.* For models of consumer furnaces or consumer boilers that have identical standby mode and off mode power consuming components, ratings for untested basic models may be established in accordance with the following procedures in lieu of testing. This method allows only for the use of ratings identical to those of a tested basic model as provided below; simulations or other modeling predictions for ratings for standby mode power consumption and off mode power consumption are not permitted.

(1) *Consumer furnaces.* Rate the standby mode and off mode power consumption of an untested basic model of a consumer furnace using the standby mode and off mode power consumption obtained from a tested basic model as a basis for ratings if all aspects of the electrical components, controls, and design that impact the standby mode power consumption or off mode power consumption are identical.

(2) *Consumer boilers.* Rate the standby mode and off mode power consumption of an untested basic model of a consumer boiler using the standby mode and off mode power consumption obtained from a tested basic model as a basis for ratings if all aspects of the electrical components, controls, and design that impact the standby mode power consumption or off mode power consumption are identical.